

**Preliminary Determination on the Permit Revision Request #3 Application of
MAZDA TOYOTA MANUFACTURING, U.S.A., INC. (MTMUS)
Huntsville, Alabama**

7-08-P391-

Mazda Toyota Manufacturing (MTMUS) Joint Venture (JV) Facility consisting of:

Paint Shop & Assembly Shop Toyota Line (Z003)

Paint Shop & Assembly Shop Mazda Line (Z004)

Miscellaneous Natural Gas Fired Combustion Equipment (Z005)

**Diesel-Fired Emergency Generators, Natural Gas-Fired Emergency Generators, &
Emergency Fire Pump Engines (Z007)**

**Natural Resources and Environmental Management
City of Huntsville
320 Fountain Circle SW
Huntsville, AL 35801**

May 2021

TABLE of CONTENTS

Engineering Analysis

Introduction.....	1
Permitting History.....	2
Current Proposed Revisions (Revision Request #3).....	3
BACT Reevaluation Requirements.....	4
Air Quality Impact Analysis Requirements.....	5
Summary.....	6

Tables

Table 1: MTMUS Campus-Wide Emission Tracking
Table 2: Summary of Revision Request #3 Proposed Changes
Table 3a: PM BACT Evaluation (Revision Request #3 Proposed Changes)
Table 3b: VOC BACT Evaluation (Revision Request #3 Proposed Changes)
Table 3c: NO _x BACT Evaluation (Revision Request #3 Proposed Changes)
Table 3d: CO BACT Evaluation (Revision Request #3 Proposed Changes)
Table 3e: SO ₂ BACT Evaluation (Revision Request #3 Proposed Changes)
Table 3f: CO _{2e} BACT Evaluation (Revision Request #3 Proposed Changes)

Draft Permits

Air Permit No. 7-08-P391-Z003: Paint Shop & Assembly Shop Toyota Line
Air Permit No. 7-08-P391-Z004: Paint Shop & Assembly Shop Mazda Line
Air Permit No. 7-08-P391-Z005: Miscellaneous Natural Gas Fired Combustion Equipment
Air Permit No. 7-08-P391-Z007: Diesel-Fired Emergency Generators, Natural Gas-Fired Emergency Generators, & Emergency Fire Pump Engines

Engineering Analysis

**MAZDA TOYOTA MANUFACTURING, U.S.A., INC. (MTMUS)
Facility No. 7-08-P391 (regarding Permits Z003, Z004, Z005, & Z007)**

INTRODUCTION:

A Prevention of Significant Deterioration of Air Quality Permit revision application was received from Mazda Toyota Manufacturing, U.S.A., Inc., (MTMUS) by the City of Huntsville Department of Natural Resources and Environmental Management (DNREM or “Department”) on November 16, 2020 for revisions to equipment specifications, locations, and/or limitations on processes/equipment currently permitted to be installed on a motor vehicle assembly campus located at 9000 Greenbrier Parkway NW, Huntsville, Limestone County, AL 35756, approximately four (4) miles west of the Huntsville, Alabama, airport. The company is a joint venture (JV) between Mazda Motor Corporation and Toyota Motor Corporation (MTMUS) and several other entities/facilities located on property under common control that will wholly make parts for MTMUS (“MTMUS Campus”). This revision request is the third revision request since the original permitting of the Campus, and contains revisions only to the MTMUS JV facility. The

Campus is under initial construction, and production operations on Campus have not yet begun. This revision request is being submitted to update changes in control device configuration, combustion source burner heat input requirements, emergency equipment requirements, etc. As currently permitted, this Campus will produce up to 250,000 vehicles per year per line (500,000 vehicles total). There are no changes to this production capacity proposed with this revision request (Revision Request #3).

PERMITTING HISTORY:

INITIAL PERMITTING (PERMITS ISSUED DECEMBER 2018)

The original permitting effort resulted in twenty-two (22) Prevention of Significant Deterioration (PSD) of Air Quality Permits being issued for the various operations to be conducted to facilitate the production of automobiles on the MTMUS Campus, including parts pressing/stamping, parts/body welding, injection molding, painting/coating, component/body assembly, tire assembly, miscellaneous natural gas fired combustion equipment (HVAC), and emergency equipment. For regulatory applicability purposes, the MTMUS Campus (i.e., the MTMUS JV facility and other non-MTMUS facilities located on site under common property control) is considered one major stationary emission source for the purposes of PSD applicability and any required Best Available Control Technology (BACT) or air quality impact analyses performed.

In the initial permitting process, the MTMUS Campus was deemed a major source under PSD since the potential emissions of volatile organic compounds (VOCs - ozone) was greater than 250 TPY. Particulate matter (PM), carbon monoxide (CO), and nitrogen oxides (NO_x) potential emissions were also estimated to exceed the 10 TPY (PM_{2.5}), 100 TPY, and 40 TPY de minimis levels, respectively. (See Table 1 in this document for the originally permitted potential emissions for both the MTMUS Campus). Therefore, Best Available Control Technologies (BACT) were required to be installed/implemented on all significant sources of VOCs, PM, CO, NO_x, and greenhouse gases (GHGs), in accordance with the City of Huntsville Air Pollution Control Rules and Regulations (COHRAR) Section 3.5.4. Therefore, all significant sources of these pollutants underwent BACT analysis, and limitations and good work practices were incorporated into the campus-wide permits.

In accordance with the City of Huntsville Air Pollution Control Rules and Regulations (COHRAR) Section 3.5.5 through 3.5.9., an ambient air impact analysis was performed and submitted with the initial application for construction, and the impact of the facility on air quality, visibility, soils, and vegetation was assessed. The predicted ambient impacts of the source were projected to be in the immediate area of the source and were relatively minor, so no discernible impacts are expected. As the plant will be located less than 100 km (at 58.6 km) from the nearest Class I area (Sipsey Wilderness in northwest Alabama), the facility was also evaluated to determine if it would adversely affect visibility in this area in accordance with the City of Huntsville Air Pollution Control Rules and Regulations (COHRAR) Section 3.5.10. Preliminary reports from the Federal Land Manager (FLM) indicated there was no need for further evaluation.

REVISION REQUEST #1 (PERMITS ISSUED NOVEMBER 2019)

Since the original permitting effort in December of 2018, two revision requests have been processed, Revision Request #1 and Revision Request #2. As a result of Revision Request #1, six (6) permits were revised and issued in November of 2019. Under Revision Request #1, HVAC burners across the Campus underwent reevaluation of NO_x BACT limits due to vendor inability to meet the originally permitted 0.05 lb NO_x/MMBtu. Also, the number of HVAC units and respective burner ratings were updated based on more refined plant/building engineering design. DNREM reviewed the proposed BACT limitation revision for the HVAC burners against the RACT, BACT, LAER Clearinghouse (RBLC) and concurred that the requested change was BACT for this equipment.

Therefore, the NO_x BACT limitation for all HVAC units across the Campus was updated from 0.05 lb NO_x/MMBtu to 0.06 lb NO_x/MMBtu. It should be noted, however, that regardless of the increase in the NO_x limitation, Campus-wide emissions did not increase due to this change because the Campus-wide HVAC heat input decreased. Therefore, there was no significant change in potential NO_x emissions from the Campus, and the potential emissions from all other regulated air pollutants from the Campus decreased. (See Table 1 in this document for the change in emissions from the original permitting effort, subsequent revisions, as well as the resulting potential emissions from this revision). Due to potential emissions of regulated air pollutants either remaining essentially unchanged or decreasing across the Campus, a revised air quality impact analysis was not required to be performed and submitted with Revision Request #1.

REVISION REQUEST #2 (PERMITS ISSUED JULY 2020)

As a result of Revision Request #2, nine (9) permits were revised and four (4) new permits were issued in July of 2020. The new permits resulted from the reassignment of responsibility of emergency equipment and one (1) HVAC source from the JV facility to the OSPs. No permitted increase in production or change in overall operations resulted from the issuance of these new permits. This revision request also resulted in the amendment of several permits issued for the JV facility. These amendments allowed for the increase in usage of a already permitted sealer material, correction of the initial BACT permit limits associated with offline repair touch-up booth materials, addition of a replacement parts operation using a sealer material, change in heat inputs and BACT limits for some natural gas process equipment, updating of power ratings for some emergency equipment and the addition of natural gas-fired emergency generators, and a decrease in vehicle fluid storage capacity. Lastly, with regard to the OSP permits, Revision Request #3 resulted in the relocation of one HVAC unit from the roof to the ground and the addition of a cooling tower, shot blasting operation, and jig cleaning operation.

CURRENT PROPOSED REVISIONS (REVISION REQUEST #3):

This is the third revision request since the Campus was initially permitted. The changes requested under Revision Request #3 would require reissuance of four (4) of the current twenty-two (22) permits held by the MTMUS Campus, seven (7) of which are held by the MTMUS JV facility. Table 1 in this document shows the potential emissions tracking from the original permitting effort

through the emissions resulting from the proposed changes under Revision Request #3 for the MTMUS Campus.

Revision Request #3 proposes the following changes, which will affect certain permits held by the JV facility:

- **CHANGE #1:** change in VOC control technology configuration utilized in both the Toyota and Mazda Topcoat Paint Systems in the JV facility (Permits Z003 & Z004; permitted units 200-T1, T2, & T4 & 200-M1, M2, & M3). It is being proposed that one (1) thermal oxidizer for the combined Mazda and Toyota lines be used instead of one thermal oxidizer for each line. This reconfiguration will apply to the following operations: Body E-Coat Dip Tanks and Curing Ovens (Toyota (200-T1) and Mazda (200-M1) lines combined), Sealers and Miscellaneous Body Coatings (Toyota (200-T2) and Mazda (200-M2) lines combined), and Topcoat System (Toyota (200-T4) and Mazda (200-M3) lines combined). There are no proposed changes to the particulate control technologies or VOC BACT limits currently permitted for these sources. Although small changes to the material VOC content are reflected in this revision, due to the level of VOC control proposed there will not be any increase in potential emissions from these sources.
- **CHANGE #2:** decrease in total heat input and change in NO_x BACT limits for the JV facility thermal oxidizers proposed in CHANGE #1 (Permit Z005; units 1500-10 & 23, 1500-35 & 36, 1500-14 & 16, and 1500-27 & 29 to be combined and renamed as 1500-101, 1500-102, 1500-103, and 1500-104, respectively). The VOC control technology suppliers have informed MTMUS that the permitted 0.05 lb NO_x/MMBtu BACT limit cannot be achieved by the burners available for the thermal oxidizers proposed. The burners available can achieve 0.06 lb NO_x/MMBtu. However, due to the overall decrease in heat input for the proposed thermal oxidizers, there will be a slight decrease in potential combustion emissions from these sources even with the increase in the NO_x factor.
- **CHANGE #3:** change of type (natural gas to diesel) and rating (469 hp to 900 hp) of the emergency generator in the wastewater treatment area and addition of a diesel-fueled fire water pump in the wastewater area at the JV facility (Permit Z007; unit 1700-3c to be removed and unit 1700-1c added, and 1700-2a amended to be two (2) engines).

A detailed description of the permit changes proposed are attached as Table 2.

BACT RE-EVALUATION REQUIREMENTS:

For Revision Request #3, BACT was reevaluated for the thermal oxidizers proposed in change #1 and #2 above. Due to proposed changes in NO_x emission limits from various process combustion sources on the Campus due to vendor inability to meet/guarantee the permitted factor, a BACT reevaluation was performed to assess whether the vendor guaranteed factors would still be considered BACT. Although it is proposed to increase the NO_x emission factor for these select combustion sources, the overall heat input of the thermal oxidizers is proposed to decrease, resulting in a decrease in potential NO_x emissions. The emission factors for all other combustion pollutants are to remain unchanged; therefore, BACT reevaluation for all other pollutants from these combustion sources was not required. The overall Campus-wide decrease in combustion

related emissions can be seen in Table 1 of this document. Low-NO_x burners, combustion of only clean burning fuel (natural gas), and energy efficiency (good combustion practices and preventative maintenance) will be utilized for the combustion sources across the MTMUS Campus.

As it is proposed with this revision request that a fire pump will be added and an existing permitted natural gas-fired emergency engine will be replaced by a diesel engine of a higher capacity, BACT was reevaluated for these sources as well.

MTMUS has determined that the proposed revised emission limits and work practices listed in Tables 3a through 3f are BACT for the emission sources requiring reevaluation with this revision request. Of note, re-evaluation of BACT for the following was not required to be performed

- Change in VOC control technology configuration utilized in both the Toyota and Mazda Topcoat Paint Systems in the JV facility. There are no proposed changes to the particulate control technologies or VOC BACT limits currently permitted for these sources. Although small changes to the material VOC content are reflected in this revision, due to the level of VOC control proposed there will not be any increase in potential emissions from these sources.
- Due to the decrease in total heat input for the JV facility thermal oxidizers proposed in and the resulting slight decrease in potential combustion emissions from these sources, BACT for all combustion related pollutants other than NO_x is not required. (NO_x BACT has been reevaluated due to vendor inability to meet the previously permitted NO_x BACT limit.)

AIR QUALITY IMPACT ANALYSIS REQUIREMENTS:

With regard to the proposed changes in Revision Request #3, an air quality impact evaluation was not required to be performed at this time for PM10/PM2.5, NO_x, CO, VOC, or SO₂ since there was no significant increase of potential emissions of these pollutants.

It should be noted that, as required as a result of the initial permitting process for the Campus, that a full revised air quality impact analysis reflecting as-built building and stack parameters, as well as final anticipated potential emissions for all applicable pollutants, will be performed and submitted for approval to the DNREM prior to start of operations on the Campus.

SUMMARY:

The PSD revision application for certain Air Permits to construct and operate a motor vehicle assembly plant in Huntsville, Limestone County, Alabama currently meets the following criteria:

1. BACT has been evaluated/re-evaluated for the emission source additions/modifications for all regulated pollutants where BACT limit additions/increases are proposed. The NO_x emission limits have been modified as requested and incorporated in the proposed permit provisos (see Draft Permits).

2. There are no significant increases in regulated pollutant emissions; therefore, an updated significant impact level (SIL) analysis was not performed, and there is no predicted exceedance of the ozone National Ambient Air Quality Standards (NAAQS) or adverse impacts to human health or the environment based on ambient air quality modeling or SIL analyses performed with the initial permitting of the Campus or subsequent SIL analysis performed with Revision Request #2. NOTE: When all final design specifications for the entire Campus are confirmed, MTMUS will submit updated modeling results from an air quality impact evaluation performed based on the final design specifications and permitted emissions.

DNREM concurs with MTMUS's determination that the proposed changes with regard to Revision Request #3 will not change the previously demonstrated impact on the surrounding air quality as presented in the original permitting process. The regulatory authority's review of the RACT/BACT/LAER Clearinghouse (RBLC) also concurs with MTMUS's determination that the revised/proposed emission limits are BACT for the affected emission sources. It is recommended that revised PSD Air Permits with the permit provisos in the attached Draft Permits be issued for the MTMUS Campus since all applicable regulations would be met. Permit fees totaling \$22,540.00 were billed at the time of public notification of this permitting action.

TABLES

TABLE 1
MTMUS CAMPUS-WIDE EMISSION REVISION TRACKING

Pollutant	Originally Permitted Campus-Wide Emissions (TPY)	Revision Request #1 Campus-Wide Change in Emissions (TPY)	Post Revision Request #1 Campus-Wide Emissions (TPY)	Revision Request #2 Campus-Wide Change in Emissions (TPY)	Post Revision Request #2 Campus-Wide Emissions (TPY)
PM/PM10/PM2.5	11.46	-0.19	11.27	0.30	11.57
SO ₂	4.24	-2.26	1.98	1.36	3.34
NO _x	264.9	0.10	265.0	-21.20	243.8
CO	422.7	-29.90	392.8	-45.90	346.9
VOC	2,322	-2.00	2,320	76.00	2,396
CO _{2e}	593,956	-47,159	546,797	-114,001	432,796

TABLE 2
MTMUS CAMPUS REVISION REQUEST #3 PROPOSED CHANGES

PERMIT NUMBER	PROPOSED CHANGE
JV – Mazda Toyota Manufacturing Joint Venture	
Z003 – Paint Shop & Assembly Shop Toyota Line (Unit 200)	<ul style="list-style-type: none"> • Small changes in VOC content of materials. Due to level of VOC control, there will be no increase in potential VOC emissions. • III.B.10, III.B.16, III.B.18, III.D.2 & III.D.3 One combined thermal oxidizer with Mazda Line (ECOAT-TO (Unit 1500-101)) for Body E-Coat Dip Tank and Curing Oven operations (200-T1 & 200-M1). • III.B.11, III.B.16, III.B.19, III.D.2 & III.D.3 One combined thermal oxidizer with Mazda Line (SEALER-TO (Unit 1500-102)) for Sealer and Miscellaneous Body Coating operations (200-T2 & 200-M2). • III.B.12, III.B.16, III.B.20, III.D.2, & III.D.3 One combined thermal oxidizer with Mazda Line (CCBOOTH-TO (Unit 1500-103)) for the Clearcoat Spray Booths (200-T4 & 200-M3), and one combined thermal oxidizer with Mazda Line (TCOVEN-TO (Unit 1500-104)) for the Topcoat Ovens (1500-15 & 1500-28).
Z004 – Paint Shop & Assembly Shop Mazda Line (Unit 200)	<ul style="list-style-type: none"> • Small changes in VOC content of materials. Due to level of VOC control, there will be no increase in potential VOC emissions. • III.B.10, III.B.16, III.B.18, III.D.2 & III.D.3 One combined thermal oxidizer with Toyota Line (ECOAT-TO (Unit 1500-101)) for Body E-Coat Dip Tank and Curing Oven operations (200-T1 & 200-M1). • III.B.11, III.B.16, III.B.19, III.D.2 & III.D.3 One combined thermal oxidizer with Toyota Line (SEALER-TO (Unit 1500-102)) for Sealer and Miscellaneous Body Coating operations (200-T2 & 200-M2). • III.B.12, III.B.16, III.B.20, III.D.2, & III.D.3 One combined thermal oxidizer with Toyota Line (CCBOOTH-TO (Unit 1500-103)) for the Clearcoat Spray Booths (200-T4 & 200-M3), and one combined thermal oxidizer with Toyota Line (TCOVEN-TO (Unit 1500-104)) for the Topcoat Ovens (1500-15 & 1500-28).
Z005 – Miscellaneous Natural Gas Fired Combustion Equipment (Unit 1500)	<ul style="list-style-type: none"> • III.B.3: change in heat input and NOx rate for thermal oxidizer burners from 0.05 to 0.06 lb

TABLE 2
MTMUS CAMPUS REVISION REQUEST #3 PROPOSED CHANGES

	NOx/MMBtu (Units 1500-101, 1500-102, 1500-103, & 1500-104).
Z007 – Two (2) Diesel-Fired Emergency Generators, Three (3) Natural Gas-Fired Emergency Generators, & One (1) Fire Pump Engine (Unit 1700)	<ul style="list-style-type: none"> • eliminated one (1) natural gas-fired emergency generator. • added one (1) diesel-fired emergency generator and one (1) diesel-fired fire water pump. • Cover Page: number of diesel fired emergency generator units in the JV facility increased to three (3) (800 kW/1072 Hp (Unit 1700-1a), 1750 kW/2346 Hp (Unit 1700-1b), & 900 Hp (Unit 1700-1c), number of diesel fire pump engines increased to two (2) (120 kW/161 Hp (Unit 1700-2)), & removal of one (1) natural gas-fired emergency generator listed (350 kW/469 Hp (Unit 1700-3c)).

Table 3a: PM BACT Evaluation/Re-evaluation

EMISSION POINT/UNIT	PERMITTED BACT	PROPOSED BACT	CONTROL DEVICE
1700-1c. One (1) Diesel-Fired Emergency Generator (900 hp) (Permit Z007)	N/A – New Source	Low Sulfur Diesel only as a fuel Proper maintenance of burner systems Limit of 100 hours/year maintenance operation Limit of only one operation/day maintenance Compliance with NSPS & NESHAP requirements	No Control
1700-2a. Two (2) Diesel-Fired Fire Water Pumps (161 hp each; 1 existing, 1 new) (Permit Z007)	N/A – for new engine Existing engine: Low Sulfur Diesel only as a fuel Proper maintenance of burner systems Limit of 100 hours/year maintenance operation Limit of only one operation/day maintenance Compliance with NSPS & NESHAP requirements	Low Sulfur Diesel only as a fuel Proper maintenance of burner systems Limit of 100 hours/year maintenance operation Limit of only one operation/day maintenance Compliance with NSPS & NESHAP requirements	No Control

Table 3b: VOC BACT Evaluation/Re-evaluation

EMISSION POINT/UNIT (CHANGE)	PERMITTED BACT	PROPOSED BACT	CONTROL DEVICE
1700-1c. One (1) Diesel-Fired Emergency Generator (900 hp) (Permit Z007)	N/A – New Source	Low Sulfur Diesel only as a fuel Proper maintenance of burner systems Limit of 100 hours/year maintenance operation Limit of only one operation/day maintenance Compliance with NSPS & NESHAP requirements	No Control
1700-2a. Two (2) Diesel-Fired Fire Water Pumps (161 hp each; 1 existing, 1 new) (Permit Z007)	N/A – for new engine Existing engine: Low Sulfur Diesel only as a fuel Proper maintenance of burner systems Limit of 100 hours/year maintenance operation Limit of only one operation/day maintenance Compliance with NSPS & NESHAP requirements	Low Sulfur Diesel only as a fuel Proper maintenance of burner systems Limit of 100 hours/year maintenance operation Limit of only one operation/day maintenance Compliance with NSPS & NESHAP requirements	No Control

Table 3c: NO_x BACT Evaluation/Re-evaluation

EMISSION POINT/UNIT	PERMITTED BACT	PROPOSED BACT	CONTROL DEVICE
<p>1500-101, 1500-102, 1500-103, and 1500-104. Natural Gas Combustion Equipment – Thermal Oxidizers (Permit Z005)</p> <p>(CHANGE: Combining thermal oxidizers for the Mazda and Toyota lines into one oxidizer instead of two and renaming units (formerly 1500-10 & 23, 1500-35 & 36, 1500-14 & 16, and 1500-27 & 29). Update lb NO_x/MMBtu of heat input for thermal oxidizer burners due to vendor inability to guarantee “as-permitted” rate. Decrease in overall burner heat input.)</p>	<p>Natural Gas only as a fuel</p> <p>Proper maintenance of burner systems</p> <p>Vendor Guarantees</p> <p>0.05 lb/MMBtu of heat input</p> <p>Low-NO_x Burners</p>	<p>Natural Gas only as a fuel</p> <p>Proper maintenance of burner systems</p> <p>Vendor Guarantees</p> <p>Thermal Oxidizers: 0.06 lb/MMBtu of heat input</p> <p>Low-NO_x Burners</p>	<p>Low-NO_x Burners</p>
<p>1700-1c. One (1) Diesel-Fired Emergency Generator (900 hp) (Permit Z007)</p>	<p>N/A – New Source</p>	<p>Low Sulfur Diesel only as a fuel</p> <p>Proper maintenance of burner systems</p> <p>Limit of 100 hours/year maintenance operation</p> <p>Limit of only one operation/day maintenance</p> <p>Compliance with NSPS & NESHAP requirements</p>	<p>No Control</p>

Table 3c: NO_x BACT Evaluation/Re-evaluation

EMISSION POINT/UNIT	PERMITTED BACT	PROPOSED BACT	CONTROL DEVICE
<p>1700-2a. Two (2) Diesel-Fired Fire Water Pumps (161 hp each; 1 existing, 1 new) (Permit Z007)</p>	<p>N/A – for new engine Existing engine: Low Sulfur Diesel only as a fuel Proper maintenance of burner systems Limit of 100 hours/year maintenance operation Limit of only one operation/day maintenance Compliance with NSPS & NESHAP requirements</p>	<p>Low Sulfur Diesel only as a fuel Proper maintenance of burner systems Limit of 100 hours/year maintenance operation Limit of only one operation/day maintenance Compliance with NSPS & NESHAP requirements</p>	<p>No Control</p>

Table 3d: Changes Requiring CO BACT Evaluation/Re-evaluation

EMISSION POINT/UNIT	PERMITTED BACT	PROPOSED BACT	CONTROL DEVICE
1700-1c. One (1) Diesel-Fired Emergency Generator (900 hp) (Permit Z007)	N/A – New Source	Low Sulfur Diesel only as a fuel Proper maintenance of burner systems Limit of 100 hours/year maintenance operation Limit of only one operation/day maintenance Compliance with NSPS & NESHAP requirements	No Control
1700-2a. Two (2) Diesel-Fired Fire Water Pumps (161 hp each; 1 existing, 1 new) (Permit Z007)	N/A – for new engine Existing engine: Low Sulfur Diesel only as a fuel Proper maintenance of burner systems Limit of 100 hours/year maintenance operation Limit of only one operation/day maintenance Compliance with NSPS & NESHAP requirements	Low Sulfur Diesel only as a fuel Proper maintenance of burner systems Limit of 100 hours/year maintenance operation Limit of only one operation/day maintenance Compliance with NSPS & NESHAP requirements	No Control

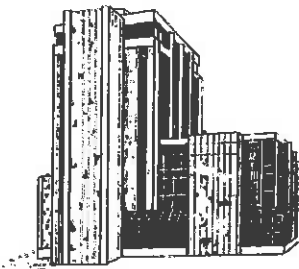
Table 3e: Changes Requiring SO2 BACT Evaluation/Re-evaluation

EMISSION POINT/UNIT	PERMITTED BACT	PROPOSED BACT	CONTROL DEVICE
1700-1c. One (1) Diesel-Fired Emergency Generator (900 hp) (Permit Z007)	N/A – New Source	Low Sulfur Diesel only as a fuel Proper maintenance of burner systems Limit of 100 hours/year maintenance operation Limit of only one operation/day maintenance Compliance with NSPS & NESHAP requirements	No Control
1700-2a. Two (2) Diesel-Fired Fire Water Pumps (161 hp each; 1 existing, 1 new) (Permit Z007)	N/A – for new engine Existing engine: Low Sulfur Diesel only as a fuel Proper maintenance of burner systems Limit of 100 hours/year maintenance operation Limit of only one operation/day maintenance Compliance with NSPS & NESHAP requirements	Low Sulfur Diesel only as a fuel Proper maintenance of burner systems Limit of 100 hours/year maintenance operation Limit of only one operation/day maintenance Compliance with NSPS & NESHAP requirements	No Control

Table 3f: Changes Requiring CO₂ BACT Evaluation/Re-evaluation

EMISSION POINT/UNIT	PERMITTED BACT	PROPOSED BACT	CONTROL DEVICE
1700-1c. One (1) Diesel-Fired Emergency Generator (900 hp) (Permit Z007)	N/A – New Source	Low Sulfur Diesel only as a fuel Proper maintenance of burner systems Limit of 100 hours/year maintenance operation Limit of only one operation/day maintenance Compliance with NSPS & NESHAP requirements	No Control
1700-2a. Two (2) Diesel-Fired Fire Water Pumps (161 hp each; 1 existing, 1 new) (Permit Z007)	N/A – for new engine Existing engine: Low Sulfur Diesel only as a fuel Proper maintenance of burner systems Limit of 100 hours/year maintenance operation Limit of only one operation/day maintenance Compliance with NSPS & NESHAP requirements	Low Sulfur Diesel only as a fuel Proper maintenance of burner systems Limit of 100 hours/year maintenance operation Limit of only one operation/day maintenance Compliance with NSPS & NESHAP requirements	No Control

DRAFT PERMITS



CITY OF HUNTSVILLE
NATURAL RESOURCES AND ENVIRONMENTAL
MANAGEMENT DIVISION

PSD AIR PERMIT

Issued to: Mazda Toyota Manufacturing U.S.A., Inc. (MTMUS)

Location: 9000 Greenbrier Parkway NW

Huntsville, Alabama 35756

Permit Number(s)

Description of Source(s)

7-08-P391-Z003

Manufacturing of Automobiles: Toyota Line

Paint Shop Operations (Unit 200)

Assembly Shop Operations (Unit 300)

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, Code of Alabama 1975, 22-28-1 to 22-28-23 (the "AAPCA") and the Alabama Environmental Management Act, as amended, Code of Alabama 1975, 22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and the City of Huntsville Air Pollution Control Rules and Regulations Ordinance 72-156, as amended ("COHRAR") and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to operate the equipment, device(s) or other article(s) described above.

Pursuant to the Clean Air Act of 1990, all conditions of this permit are federally enforceable by EPA, the Alabama Department of Environmental Management (ADEM), the City of Huntsville Division of Natural Resources and Environmental Management ("the Department"), and citizens in general. Those provisions which are not required under the Clean Air Act of 1990 are considered to be local permit provisions and are not federally enforceable by EPA and citizens in general. Those provisions are contained in separate sections of this permit.

Page 1 of 16 pages

Date of Issuance:

DRAFT

DIRECTOR

NATURAL RESOURCES AND ENVIRONMENTAL
MANAGEMENT DIVISION
CITY OF HUNTSVILLE, ALABAMA

PSD AIR PERMIT
TABLE OF CONTENTS

I. GENERAL (FACILITY-WIDE) PERMIT CONDITIONS

GENERAL AIR POLLUTION CONTROL REQUIREMENTS 1

II. FACILITY SPECIFIC PERMIT CONDITIONS

..... 5

DRAFT

Mazda Toyota Manufacturing U.S.A., Inc. (MTMUS)
9000 Greenbrier Parkway NW
Huntsville, Alabama 35756

I. FEDERALLY ENFORCEABLE GENERAL (FACILITY-WIDE) PERMIT CONDITIONS

I.A. General Air Pollution Control Requirements

1. Duty to Comply

The permittee shall comply with all conditions of the City of Huntsville Rules and Regulations (COHRAR). Noncompliance with this permit will constitute a violation of the Clean Air Act of 1990 and COHRAR, and may result in an enforcement action; including but not limited to, permit termination, revocation and reissuance or modification; or denial of a permit renewal application by the permittee.

2. Operation of Capture and Control Devices

All air pollution control devices and capture systems for which this Permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emissions of air contaminants shall be established.

3. Circumvention

The permittee shall not cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes any emission of air contaminant which would otherwise violate this Permit or COHRAR.

I.B. General Monitoring, Inspection, Record-Keeping and Reporting Requirements

1. Monitoring, Records and Reporting

- (A) The Director may require the permittee to establish and maintain records; make reports; install, use and maintain monitoring equipment or methods; sample emissions in accordance with such methods, at such locations and intervals, and using such procedures and provide such emissions reports as are prescribed by the Director to demonstrate compliance with the terms of this Permit and with COHRAR.
- (B) Records and Reports as the Director shall prescribe on air contaminants or fuel shall be recorded, compiled, and submitted on forms provided by the Director or in formats approved by the Director.
- (C) All required sampling and testing shall be made and the results calculated in accordance with sampling and testing procedures and methods approved by the Director. All required

samples and tests shall be made under the direction of persons qualified by training and/or experience in the field of air pollution control. To the extent practicable, test methods and procedures established by Part 60, Part 61, and Part 63 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised, shall be employed.

- (D) Sampling and testing facilities adequate to facilitate sampling and testing as required under section I.B.1(C) above will be provided and maintained by the permittee.

2. Inspection and Entry

- (A) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of the City of Huntsville Division of Natural Resources & Environmental Management ("the Department") to enter upon the permittee's premises on or at which an air contaminant source is located or is being constructed, installed, or established at any reasonable time to ascertain the state of compliance with this Permit and the COHRAR.
- (B) No person shall obstruct, hamper, or interfere with any such inspection initiated under I.B.2(A) above.
- (C) If requested, the owner or operator shall receive a report from the Director which sets forth the findings of the inspection initiated under I.B.2(A) above with respect to compliance status.

3. Display of Permit

The permittee shall keep this Permit under file or on display at all times at the permitted facility and shall make this Permit available for inspection by any and all persons who may request to see it.

4. Equipment Maintenance or Breakdown

- (A) In case of shutdown of air pollution control equipment for scheduled maintenance for a period greater than one (1) hour, the intent to shut down shall be reported to the Department at least twenty-four (24) hours prior to the planned shut-down. The Department shall be notified when maintenance on the air pollution control equipment is complete and the equipment is operating.
- (B) In the event there is a breakdown of equipment in such a manner as to cause increased emission of air contaminants for a period greater than one (1) hour, the person responsible for such equipment shall notify the Department within an additional twenty-four (24) hours and provide a statement giving all pertinent facts, including the duration of the breakdown. The Department shall be notified when the breakdown has been corrected.

I.C. Permit Modification, Renewal, and Termination

1. Transfer

This permit is not transferable, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another, or from one person to another.

2. New Air Pollution Sources

- (A) A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.
- (B) Every application for a permit shall be filed in the manner and form prescribed by the Director and shall give all the information necessary to enable the Director to make the determination required by COHRAR Part 3.3.

3. Revocation for Cause

This Permit may be revoked for any of the following causes:

- (A) Failure to comply with any condition of this Permit or COHRAR.
- (B) Failure to notify the Director prior to operation of any article, machine, equipment, or other contrivance subject to the requirements of COHRAR § 3.1.2(a).
- (C) Failure to establish and maintain such records, make such reports, or install, use, or maintain such monitoring equipment or methods; and sample such emissions in accordance with such methods at such locations, intervals and procedures as the Director may prescribe in accordance with COHRAR § 1.9.2.
- (D) Failure to allow the Director or his authorized representative upon proper identification to:
 - (1) enter any premises, at reasonable times, where any article, machine, equipment, or other contrivance described in COHRAR § 3.1.2 is located or in which any records required to be kept by this Permit or by COHRAR are located;
 - (2) have access to and copy any records required to be kept by this Permit or by COHRAR;
 - (3) inspect any monitoring equipment or practices being maintained pursuant to this Permit or COHRAR; OR

- (4) have access to and sample any discharge of air contaminants resulting directly or indirectly from the operation of any article, machine, equipment or other contrivance described in COHRAR § 3.1.2.
- (E) Failure to comply with the provisions of an administrative order issued by the Director concerning the permitted facility.
- (F) For any other cause, after a hearing which establishes, in the judgment of the Director, that continuance of this Permit is not consistent with the purpose of the Act or regulations under it, or is not consistent with the purposes of the Federal Clean Air Act or regulations under it.

4. Major Source Operating Permit Application

As the facility subject to this Permit is also subject to the requirements of 40 CFR Part 70, application for issuance of the facility's initial Major Source Operating Permit (MSOP) must be made within twelve (12) months of startup of the process equipment identified in this Permit.

I.D. Emergency Provisions

1. Emergency Procedure

The permittee shall comply with the provisions of an emergency order to immediately reduce or discontinue the emission of air contaminants, if the Director finds that such action is necessary to protect human health or safety, in accordance with COHRAR § 2.9.

2. Emission Reduction Standby Plan

Within thirty (30) days of receipt of a written request from the Director, the permittee shall prepare and submit a standby plan for reducing the emissions of air contaminants during periods of an Episode Alert, Warning, and Emergency. The standby plan is subject to approval by the Director.

I.E. Authority of Department

Nothing in the permit or conditions thereto shall negate any authority granted to the Division of Natural Resources or the Alabama Department of Environmental Management pursuant to the Alabama Environmental Management Act or regulations issued thereunder. [§ 22-28-23, Code of AL 1975, as amended]

II. NON-FEDERALLY ENFORCEABLE GENERAL (FACILITY-WIDE) PERMIT CONDITIONS

II.A. Objectionable Odors

This permit is issued with the condition that the operation of this facility by the owner or operator will not result in the emission of objectionable odors as defined in COHRAR Part 6.7.

III. FACILITY-SPECIFIC FEDERALLY ENFORCEABLE PERMIT CONDITIONS

III.A. Applicability

1. This source is subject to PSD-BACT emission limitations.
2. This source is subject to the New Source Performance Standards (NSPS) as defined in 40 CFR 60, Subpart MM and the General Provisions in Subpart A.
3. This unit is subject to the opacity emission rate limits.
4. This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Hazardous Air Pollutant (HAP) Emissions from Surface Coating of Automobiles and Light-Duty Trucks Operations (III) as a "New Source".
5. This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Hazardous Air Pollutant (HAP) Emissions from Surface Coating of Miscellaneous Metal Parts and Products (MMMM) as a "New Source".
6. This source is subject to 112g emission limitations.

III.B. Emission Standards

1. Emission of Volatile Organic Compounds (VOCs) from this Unit, Toyota Line (Unit 200-T1, Unit 200-T2, Unit 200-T4, Unit 200-T6, Unit 200-T7, Unit 200-T8, Unit 200-T9, and Unit 200-T13) shall not exceed 343.2 tons per year (TPY) in any consecutive rolling 12-month period.
2. Emission of Volatile Organic Compounds (VOCs) from the combined plantwide emissions from MTMUS (Permits Z001-Z007) shall not exceed 1,367 tons per year (TPY) in any consecutive rolling 12-month period.
3. Emission of Volatile Organic Compounds (VOCs) from this Unit, Toyota Line (Unit 200-T10) from all Miscellaneous Cleaning Materials shall not exceed 48.2 tons per year (TPY) in any consecutive rolling 12-month period.

4. Emission of Volatile Organic Compounds (VOCs) from this Unit, Toyota Line (Unit 200-T11) from all Purge Materials shall not exceed 169.6 tons per year (TPY) in any consecutive rolling 12-month period.
5. Emission of Volatile Organic Compounds (VOCs) from this Unit, Toyota Line Unit 200-T12) from all Wiping Solvents shall not exceed 18 tons per year (TPY) in any consecutive rolling 12-month period.
6. Emission of Volatile Organic Compounds (VOCs) from this Unit, Toyota Line Unit 300-T1) from all Wax Applications shall not exceed 20.5 tons per year (TPY) in any consecutive rolling 12-month period.
7. This source (Wax Application)(300-T1) is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Hazardous Air Pollutant (HAP) Emissions from Surface Coating of Miscellaneous Metal Parts and Products (MMMM) as defined in 40 CFR 63, Subpart MMMM §63.3880-3981 to include §63.3890 (a) on a calendar monthly average (1.9 pounds VHAP/gallon of coating solids/12-month compliance period).
8. This source is subject to the applicable emissions standards of New Source Performance Standards (NSPS) as defined in 40 CFR 60, Subpart MM §60.392 to include §60.392 (a), (b), and (c) on a calendar monthly average.

OPERATION	VOC EMISSION LIMIT lb./gal ACS
Primecoat: E-coat (Unit 200-T1)	1.34
Topcoat: Basecoat (Unit 200-T4) & Clearcoat (Unit 200-T4)	12.27

9. This source is subject to the BACT limits below:

OPERATION	MONTHLY VOC EMISSION LIMIT lb./gal ACS
Primecoat: E-coat (Unit 200-T1)	0.1
Topcoat: Basecoat Booth (Unit 200-T4) & Clearcoat Booth and Oven (Unit 200-T4) (Wet on Wet System)	4.80
Blackout (Unit 200-T6)	1.00 lb./gal, as applied
Sealer/Deadener (Unit 200-T2)	0.30 lb./gal, as applied
Wax Application (Unit 300-T1) (monthly average)	4.0 lb./gal, as applied

10. This source is subject to the BACT limits below:

<u>OPERATION</u>	<u>VOC BACT</u>
------------------	-----------------

Combined Ecoat Exhaust (Mazda and Toyota Lines) ECOAT-TO (Unit 1500-101)	95% Removal Efficiency
--	------------------------

The Combined Ecoat Exhaust (Mazda and Toyota Lines) ECOAT-TO (Unit 1500-101) shall not emit greater than 0.52 pounds of CO/hour as measured in accordance with 40 CFR Part 60, Appendix A, Method 10, or equivalent method as approved by the Department, if required to test by the Department (3-hour arithmetic average).

The Combined Ecoat Exhaust (Mazda and Toyota Lines) ECOAT-TO (Unit 1500-101) shall not emit greater than 0.82 pounds of NO_x/hour as measured in accordance with 40 CFR Part 60, Appendix A, Method 7, 7E, or equivalent method as approved by the Department, if required to test by the Department (3-hour arithmetic average).

11. This source is subject to the BACT limits below:

<u>OPERATION</u>	<u>VOC BACT</u>
------------------	-----------------

Combined Sealer Oven Exhaust (Mazda and Toyota Lines) SEALER-TO (Unit 1500-102)	95% Removal Efficiency
---	------------------------

The Combined Sealer Oven Exhaust (Mazda and Toyota Lines) SEALER-TO (Unit 1500-102) shall not emit greater than 0.24 pounds of CO/hour as measured in accordance with 40 CFR Part 60, Appendix A, Method 10, or equivalent method as approved by the Department, if required to test by the Department (3-hour arithmetic average).

The Combined Sealer Oven Exhaust (Mazda and Toyota Lines) SEALER-TO (Unit 1500-102) shall not emit greater than 0.32 pounds of NO_x/hour as measured in accordance with 40 CFR Part 60, Appendix A, Method 7, 7E, or equivalent method as approved by the Department, if required to test by the Department (3-hour arithmetic average).

12. This source is subject to the BACT limits below:

<u>OPERATION</u>	<u>VOC BACT</u>
------------------	-----------------

Combined Clearcoat Booth Exhaust (Mazda and Toyota Lines) CCBOOTH-TO (Unit 1500-103)	95% Removal Efficiency
--	------------------------

Combined Topcoat Oven Exhaust (Mazda and Toyota Lines) TCOVEN-TO (Unit 1500-104)	95% Removal Efficiency
--	------------------------

The Combined Clearcoat Booth Exhaust (Mazda and Toyota Lines) CCBOOTH-TO (Unit

1500-103) and Combined Topcoat Oven Exhaust (Mazda and Toyota Lines) TCOVEN-TO (Unit 1500-104) shall not emit greater than 1.09 pounds of CO/hour as measured in accordance with 40 CFR Part 60, Appendix A, Method 10, or equivalent method as approved by the Department, if required to test by the Department (3-hour arithmetic average).

The Combined Clearcoat Booth Exhaust (Mazda and Toyota Lines) CCBOOTH-TO (Unit 1500-103) and Combined Topcoat Oven Exhaust (Mazda and Toyota Lines) TCOVEN-TO (Unit 1500-104) shall not emit greater than 1.73 pounds of NO_x/hour as measured in accordance with 40 CFR Part 60, Appendix A, Method 7, 7E, or equivalent method as approved by the Department, if required to test by the Department (3-hour arithmetic average).

13. This source is subject to the BACT limits below:

OPERATION	PARTICULATE BACT #/hour
Toyota Line Topcoat Booth (Unit 200-T4)	0.6
Toyota Line Blackout Booth (Unit 200-T6)	0.2
Toyota Line Cavity Wax Booth (Unit 200-T7)	0.02
Toyota Line Offline Repair Booth (Unit 200-T8)	0.1
Toyota Line Underbody Touch-Up Booth (Unit 200-T9)	0.001

14. Only natural gas may be used as fuel in the combustion equipment with the exception of the diesel fueled emergency generator(s), diesel fueled emergency fire pump(s), and gasoline engines.
15. This source (Phosphate/E-Coat)(200-T1), (Sealer/Misc. Body Coatings)(200-T2), (Topcoat System)(200-T4), (Miscellaneous Cleaning)(200-T10), (Purge Materials)(200-T11), (Wiping Solvents)(200-T12), (Assembly Final Repair Area)(300-T2), and (Windshield Installation)(300-T3) is/are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Hazardous Air Pollutant (HAP) Emissions from Surface Coating of Automobiles and Light Duty Trucks (III) as defined in 40 CFR 63, Subpart III §63.3080-3176 to include §63.3890 (a), (b), (c), (d), and (f) on a calendar monthly average.
16. The Combined Ecoat Exhaust (Mazda and Toyota Lines) ECOAT-TO (Unit 1500-101), Combined Sealer Oven Exhaust (Mazda and Toyota Lines) SEALER-TO (Unit 1500-102), Combined Clearcoat Booth Exhaust (Mazda and Toyota Lines) CCBOOTH-TO (Unit 1500-103), and Combined Topcoat Oven Exhaust (Mazda and Toyota Lines) TCOVEN-TO (Unit 1500-104) shall be operated at or above the temperature (3-run arithmetic average) at which compliance is demonstrated during the initial performance test, or subsequent tests which demonstrate compliance.
17. VOC BACT for Unit 300-T4: A Stage II vapor control system or On Board Vapor Recovery system shall be installed and used during filling of the gas tank for each vehicle.

18. The following units will be captured and directed to the Combined Ecoat Exhaust (Mazda and Toyota Lines) ECOAT-TO (Unit 1500-101):
E-Coat Tank (Unit 200-T1 and Unit 200-M1)
and Curing Oven (Unit 1500-8 and Unit 1500-21)
19. The following units will be captured and directed to the Combined Sealer Oven Exhaust (Mazda and Toyota Lines) SEALER-TO (Unit 1500-102):
Sealer Oven (Unit 1500-9 and Unit 1500-22)
20. The following units will be captured and directed to the Combined Clearcoat Booth Exhaust (Mazda and Toyota Lines) CCBOOTH-TO (Unit 1500-103):
Topcoat Booth Solventborne Clearcoat (Interior) (Unit 200-T4 and Unit 200-M3)
Topcoat Booth Solventborne Clearcoat (Exterior) (Unit 200-T4 and Unit 200-M3)

The following units will be captured and directed to the Combined Topcoat Oven Exhaust (Mazda and Toyota Lines) TCOVEN-TO (Unit 1500-104):
Topcoat Curing Oven (Unit 1500-15 and Unit 1500-28)

MTMUS may change the number of thermal oxidizers and specific zones of Unit 200-T4 and Unit 200-M3 exhausted to the thermal oxidizers; however, MUMUS must provide accurate descriptions of the zones going to the thermal oxidizers and must receive updated air permits prior to commencement of operation.

21. The following (112g) emission limits are applicable:

MTMUS shall implement a work practice plan to minimize organic HAP emissions from the storage, mixing, and conveying of coatings, thinners, and cleaning materials used in, and waste materials generated by, all coating operations for which emission limits are established.
22. The stack(s) associated with this (these) source(s) shall not exhibit greater than 10% opacity measured in accordance with 40 CFR Part 60, Appendix A, Method 9 per COHRAR § 6.1.2. If opacity of 5% or greater is observed from a stack, the operator shall investigate the cause and make any necessary corrective actions.
23. VOC BACT: MTMUS shall utilize good work practices that are practically and economically feasible that reasonably minimize coating materials and clean-up/purge/general solvent usage in all operations. Coatings, solvents, and other VOC containing material will be handled in such a way as to minimize VOC emissions from storage, handling, coating, and cleanup. Closed containers shall be used for the storage and disposal of cloth or other material used for VOC containing material cleanup or usage. Coatings and other fresh or spent VOC coating material will be stored in closed containers.

III.C. Compliance and Performance Test Methods and Procedures

1. The HAP content by weight of each HAP-containing material used shall be determined using vendor provided material safety data sheets or technical data sheets that contain a listing of individual regulated HAP ingredients expressed as a percent by weight. Should the Department request verification of formulation data, the HAP content of coatings shall be determined on a random basis using EPA Test Method 311, as defined in 40 CFR 63, Appendix A, or an alternative method approved in advance.
2. The VOC content by weight of each VOC containing material used shall be determined using EPA Test Method 24, as defined in 40 CFR 60, Appendix A, or an alternative method approved in advance. Equivalent vendor data based on this method is an appropriate substitute. The VOC content of coatings may be determined by test method on a random basis to verify formulation data and such other times as the Department may request.
3. EPA document *"Protocol for Determining Daily VOC Emission Rate of Automobile and Light Duty Truck Topcoat Operations"*, June 10, 1988, and revisions thereafter, shall be used to determine transfer efficiencies, booth/oven splits, and control efficiencies for compliance with the VOC BACT Determinations. The transfer efficiencies listed in 40 CFR 60, Subpart MM or approved by the Administrator, shall be used to determine compliance with the NSPS limits in Proviso Number III.B.7 of this permit.
4. Method 5 or 5a as defined in 40 CFR 60, Appendix A, or equivalent method as approved by the Department, shall be used in the determination of particulate emissions from the stack.
5. Method 7 or 7E as defined in 40 CFR 60, Appendix A, or equivalent method as approved by the Department, shall be used in the determination of Nitrogen oxides emissions from the stack.
6. Method 10 as defined in 40 CFR 60, Appendix A, or equivalent method as approved by the Department, shall be used in the determination of Carbon Monoxide emissions from the stack.
7. Method 9 as defined in 40 CFR 60, Appendix A, or equivalent method as approved by the Department, shall be used in the determination of the opacity of the stack emissions.
8. Method 18 or 25, as determined by the Department, as defined in 40 CFR 60, Appendix A, or equivalent method as approved by the Department, shall be used in the determination of Volatile Organic Compound emissions from the stack. The test method will be determined by the Department before testing.

III.D. Emission Monitoring

1. The monitoring requirements in this permit shall be as required in Section III.E--Recordkeeping and Reporting Requirements in addition to those listed below.

2. Emissions tests to demonstrate removal and destruction efficiency for the control devices are to be conducted for VOCs (for emission points: Combined Ecoat Exhaust (Mazda and Toyota Lines) ECOAT-TO (Unit 1500-101), Combined Sealer Oven Exhaust (Mazda and Toyota Lines) SEALER-TO (Unit 1500-102), Combined Clearcoat Booth Exhaust (Mazda and Toyota Lines) CCBOOTH-TO (Unit 1500-103), and Combined Topcoat Oven Exhaust (Mazda and Toyota Lines) TCOVEN-TO (Unit 1500-104) using the EPA Protocol specified in proviso number III.C.3), transfer efficiencies, booth splits, control efficiencies, for the coatings used in coating operations using Method 24 or 311, or equivalent methods as approved by the Department, as appropriate and other items as determined at intervals not to exceed 3 years or if a significant model change occurs (as determined by the Department) following the date of initial compliance testing. All test reports must be submitted to the Department within 30 days of completion of testing, unless an extension is granted by the Department. Emission tests are to be conducted by persons familiar with and using the EPA Sampling Train and Test Procedure as described in the Code of Federal Regulations, Title 40, Part 60, Method 18 or 25, 24 or 311 as appropriate as required by the Department.
3. A continuous recorder for the emission points: Combined Ecoat Exhaust (Mazda and Toyota Lines) ECOAT-TO (Unit 1500-101), Combined Sealer Oven Exhaust (Mazda and Toyota Lines) SEALER-TO (Unit 1500-102), Combined Clearcoat Booth Exhaust (Mazda and Toyota Lines) CCBOOTH-TO (Unit 1500-103), and Combined Topcoat Oven Exhaust (Mazda and Toyota Lines) TCOVEN-TO (Unit 1500-104) shall be installed, calibrated, and maintained to record the combustion temperature in a permanent form suitable for inspection upon request. The records shall be retained for at least five years following the date of such measurement.
4. The wet/dry filtration system(s) for this unit(s) shall be inspected for proper operation twice weekly. The manufacturer's suggested rates for the control equipment shall be used to determine proper control device operation.
5. Whenever maintenance checks required in proviso III.D.4 are out of normal operational range, corrective action to minimize emissions shall be taken within 48 hours, followed by an additional maintenance check(s) to confirm that emissions are reduced to normal.
6. This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Hazardous Air Pollutant (HAP) Emissions from Surface Coating of Miscellaneous Metal Parts and Products (MMMM) as defined in 40 CFR 63, Subpart MMMM §63.3880-3981.
7. This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Hazardous Air Pollutant (HAP) Emissions from Surface Coating of Automobiles and Light Duty Trucks (III) as defined in 40 CFR 63, Subpart III §63.3080-3176.

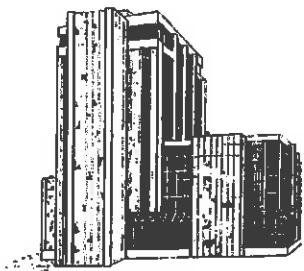
III.E. Recordkeeping and Reporting Requirements

1. Accurate and understandable records of consumption of VOCs, which record at least the last five years of data, will be maintained in a permanent form suitable for inspection and be available immediately upon request. This facility shall provide a copy of records and supporting background documents upon request that pertain to this permit. These records shall contain the following information:
 - (A) The type, quantity in gallons, and weight in pounds of each VOC or VHAP containing material used during each calendar month.
 - (B) The percent by weight of VOCs, water, solids, VHAPs, and exempt VOC compounds content of each VOC containing material used each calendar month.
 - (C) The percent by volume of VOCs, water, solids, VHAPs, and exempt VOC compounds content of each VOC containing material used each calendar month.
 - (D) Compliance with VOC and VHAP limits shall be based upon monthly material use inventories and demonstrated destruction efficiency of the RTOs . Emissions may be adjusted for VOC and VHAP content of material removed from the plant as waste or returns if the record keeping and details surrounding the materials are approved in advance.
 - (E) Complete inventories of the VOC and VHAP containing materials (their usage, VOC content and VHAP content) shall be made at the end of each calendar month.
 - (F) The amount of VOCs emitted per calendar month from the coating and cleaning operations in units of pounds and tons.
 - (G) The rolling 12-month total of VOCs emitted from the coating and cleaning operations in units of pounds and tons.
 - (H) A report summarizing the above information shall be submitted each calendar quarter by the 30th day of the month following the end of the quarter, in a format approved by the Department in advance.
 - (I) By the 30th day of the month following the end of each month, compliance with all provisos in this permit will be determined. These records will be maintained for 5 years. Should this facility, at any time, exceed the limits in this permit, the Department must be notified in writing within ten (10) days of the identification of the exceedance.
2. The minimum operational temperature of the combustion chamber of the thermal oxidizer(s) for the process equipment shall be determined by test. Following testing, the temperature corresponding to an acceptable VOC destruction efficiency shall be established as the minimum operation temperature of the combustion chamber. This minimum operation temperature will be calculated on a consecutive 3-hour averaging time period. A temperature reading must normally be taken at least every five minutes. The

temperature data must be instantaneously recorded on a chart or other permanent record form which shows continuous temperature readings of the combustion chamber temperature. The record must be maintained for at least five years following the data recording.

3. The thermal oxidizer(s) must have audible alarm or easily detectable signal which will provide a warning when the combustion chamber temperature decreases to less than the established minimum operational temperature. The origin and detectability of the audible or other signal shall be such that it can be readily heard or detected by the operator or another person who will immediately determine the cause and take appropriate action to correct any problem and/or record the malfunction/reason. The time, duration, cause(s), and the action(s) taken for any operating temperature less than the established minimum shall be recorded in a form suitable for inspection. These records shall be maintained for at least five years. If the 3 hour rolling average falls below the minimum operational temperature for more than 15 minutes, the facility will cease introducing bodies to each respective coating process, but may finish processing bodies already coated through each respective flash-off/oven area.
4. A recording-type temperature measuring device shall be used to measure and record the temperature in the combustion chamber of the thermal oxidizer(s). The recording instrument will be located for convenient reference and be of the type which provides direct reading and recording in degrees Fahrenheit. The combustion chamber temperature of the thermal oxidizer(s) will be recorded for all system operations and the recordings will be maintained in a form suitable for inspection for a period of five years.
5. When any bypassing of the thermal oxidizer(s) (TO) occurs, the time, date, or duration, estimated VOC emissions, and equipment process(es) bypassed will be recorded. Records will be maintained of any malfunction or non-operation of the TO, which results in an increase in the VOC emissions from any or all process equipment. These records will be maintained in a form suitable for inspection for a period of five years.
6. A log book or electronic records of the twice weekly maintenance checks required in proviso III.D.4 shall be retained for at least five years and available for inspection upon request. This log book or electronic records should also include the nature and date of any maintenance actions taken to correct maintenance episodes as required in III.D.5.
7. This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Hazardous Air Pollutant (HAP) Emissions from Surface Coating of Miscellaneous Metal Parts and Products (MMMM) as defined in 40 CFR 63, Subpart MMMM §63.3880-3981.
8. This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Hazardous Air Pollutant (HAP) Emissions from Surface Coating of Automobiles and Light Duty Trucks (III) as defined in 40 CFR 63, Subpart III §63.3080-3176.

9. A report summarizing the following information shall be submitted each calendar quarter by the 30th day of the month following the end of the quarter, in a format approved by the Department in advance. The report shall provide the following information for the thermal oxidizer(s), as applicable.
- (A) The quantity of the solvents of VOCs in the coatings applied.
 - (B) The VOCs not released or exhausted into the atmosphere by the thermal oxidizer(s).
 - (C) The VOCs vented to the thermal oxidizer(s) by the process operation.
 - (D) The estimated averaged destruction efficiency of the thermal oxidizer(s).
 - (E) The VOCs released or exhausted into the atmosphere by the thermal oxidizer(s).
 - (F) The time and date of any and all periods of coating operations where the temperature of the thermal oxidizer(s) is below the three hour average temperature recorded during the most recent performance test which complied with the required overall VOC emission reduction.
 - (G) The cumulative or total quantity of VOCs released or exhausted into the atmosphere by the machines and thermal oxidizer control units during the applicable month and previous eleven months.



CITY OF HUNTSVILLE
NATURAL RESOURCES AND ENVIRONMENTAL
MANAGEMENT DIVISION

PSD AIR PERMIT

Issued to: Mazda Toyota Manufacturing U.S.A., Inc. (MTMUS)

Location: 9000 Greenbrier Parkway NW

Huntsville, Alabama 35756

Permit Number(s)

Description of Source(s)

7-08-P391-Z004

Manufacturing of Automobiles, Mazda Line

Paint Shop Operations (Unit 200)

Assembly Shop Operations (Unit 300)

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, Code of Alabama 1975, 22-28-1 to 22-28-23 (the "AAPCA") and the Alabama Environmental Management Act, as amended, Code of Alabama 1975, 22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and the City of Huntsville Air Pollution Control Rules and Regulations, Ordinance 72-156, as amended ("COHRAR") and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to operate the equipment, device(s) or other article(s) described above.

Pursuant to the Clean Air Act of 1990, all conditions of this permit are federally enforceable by EPA, the Alabama Department of Environmental Management (ADEM), the City of Huntsville Division of Natural Resources and Environmental Management ("the Department"), and citizens in general. Those provisions which are not required under the Clean Air Act of 1990 are considered to be local permit provisions and are not federally enforceable by EPA and citizens in general. Those provisions are contained in separate sections of this permit.

Page 1 of 16 pages

Date of Issuance

DRAFT

DIRECTOR

NATURAL RESOURCES AND ENVIRONMENTAL
MANAGEMENT DIVISION
CITY OF HUNTSVILLE, ALABAMA

PSD AIR PERMIT
TABLE OF CONTENTS

I. GENERAL (FACILITY-WIDE) PERMIT CONDITIONS

GENERAL AIR POLLUTION CONTROL REQUIREMENTS 1

II. FACILITY SPECIFIC PERMIT CONDITIONS

..... 7

DRAFT

Mazda Toyota Manufacturing U.S.A., Inc. (MTMUS)
9000 Greenbrier Parkway NW
Huntsville, Alabama 35756

I. FEDERALLY ENFORCEABLE GENERAL (FACILITY-WIDE) PERMIT CONDITIONS

I.A. General Air Pollution Control Requirements

1. Duty to Comply

The permittee shall comply with all conditions of the City of Huntsville Rules and Regulations (COHRAR). Noncompliance with this permit will constitute a violation of the Clean Air Act of 1990 and COHRAR, and may result in an enforcement action; including but not limited to, permit termination, revocation and reissuance or modification; or denial of a permit renewal application by the permittee.

2. Operation of Capture and Control Devices

All air pollution control devices and capture systems for which this Permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emissions of air contaminants shall be established.

3. Circumvention

The permittee shall not cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes any emission of air contaminant which would otherwise violate this Permit or COHRAR.

I.B. General Monitoring, Inspection, Record-Keeping and Reporting Requirements

1. Monitoring, Records and Reporting

- (A) The Director may require the permittee to establish and maintain records; make reports; install, use and maintain monitoring equipment or methods; sample emissions in accordance with such methods, at such locations and intervals, and using such procedures and provide such emissions reports as are prescribed by the Director to demonstrate compliance with the terms of this Permit and with COHRAR.
- (B) Records and Reports as the Director shall prescribe on air contaminants or fuel shall be recorded, compiled, and submitted on forms provided by the Director or in formats approved by the Director.
- (C) All required sampling and testing shall be made and the results calculated in accordance with sampling and testing procedures and methods approved by the Director. All required

samples and tests shall be made under the direction of persons qualified by training and/or experience in the field of air pollution control. To the extent practicable, test methods and procedures established by Part 60, Part 61, and Part 63 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised, shall be employed.

- (D) Sampling and testing facilities adequate to facilitate sampling and testing as required under section I.B.1(C) above will be provided and maintained by the permittee.

2. Inspection and Entry

- (A) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of the City of Huntsville Division of Natural Resources & Environmental Management ("the Department") to enter upon the permittee's premises on or at which an air contaminant source is located or is being constructed, installed, or established at any reasonable time to ascertain the state of compliance with this Permit and the COHRAR.
- (B) No person shall obstruct, hamper, or interfere with any such inspection initiated under I.B.2(A) above.
- (C) If requested, the owner or operator shall receive a report from the Director which sets forth the findings of the inspection initiated under I.B.2(A) above with respect to compliance status.

3. Display of Permit

The permittee shall keep this Permit under file or on display at all times at the permitted facility and shall make this Permit available for inspection by any and all persons who may request to see it.

4. Equipment Maintenance or Breakdown

- (A) In case of shutdown of air pollution control equipment for scheduled maintenance for a period greater than one (1) hour, the intent to shut down shall be reported to the Department at least twenty-four (24) hours prior to the planned shut-down. The Department shall be notified when maintenance on the air pollution control equipment is complete and the equipment is operating.
- (B) In the event there is a breakdown of equipment in such a manner as to cause increased emission of air contaminants for a period greater than one (1) hour, the person responsible for such equipment shall notify the Department within an additional twenty-four (24) hours and provide a statement giving all pertinent facts, including the duration of the breakdown. The Department shall be notified when the breakdown has been corrected.

I.C. Permit Modification, Renewal, and Termination

1. Transfer

This permit is not transferable, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another, or from one person to another.

2. New Air Pollution Sources

- (A) A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.
- (B) Every application for a permit shall be filed in the manner and form prescribed by the Director and shall give all the information necessary to enable the Director to make the determination required by COHRAR Part 3.3.

3. Revocation for Cause

This Permit may be revoked for any of the following causes:

- (A) Failure to comply with any condition of this Permit or COHRAR.
- (B) Failure to notify the Director prior to operation of any article, machine, equipment, or other contrivance subject to the requirements of COHRAR § 3.1.2(a).
- (C) Failure to establish and maintain such records, make such reports, or install, use, or maintain such monitoring equipment or methods; and sample such emissions in accordance with such methods at such locations, intervals and procedures as the Director may prescribe in accordance with COHRAR § 1.9.2.
- (D) Failure to allow the Director or his authorized representative upon proper identification to:
 - (1) enter any premises, at reasonable times, where any article, machine, equipment, or other contrivance described in COHRAR § 3.1.2 is located or in which any records required to be kept by this Permit or by COHRAR are located;
 - (2) have access to and copy any records required to be kept by this Permit or by COHRAR;
 - (3) inspect any monitoring equipment or practices being maintained pursuant to this Permit or COHRAR; OR

- (4) have access to and sample any discharge of air contaminants resulting directly or indirectly from the operation of any article, machine, equipment or other contrivance described in COHRAR § 3.1.2.
- (E) Failure to comply with the provisions of an administrative order issued by the Director concerning the permitted facility.
- (F) For any other cause, after a hearing which establishes, in the judgment of the Director, that continuance of this Permit is not consistent with the purpose of the Act or regulations under it, or is not consistent with the purposes of the Federal Clean Air Act or regulations under it.

4. Major Source Operating Permit Application

As the facility subject to this Permit is also subject to the requirements of 40 CFR Part 70, application for issuance of the facility's initial Major Source Operating Permit (MSOP) must be made within twelve (12) months of startup of the process equipment identified in this Permit.

I.D. Emergency Provisions

1. Emergency Procedure

The permittee shall comply with the provisions of an emergency order to immediately reduce or discontinue the emission of air contaminants, if the Director finds that such action is necessary to protect human health or safety, in accordance with COHRAR § 2.9.

2. Emission Reduction Standby Plan

Within thirty (30) days of receipt of a written request from the Director, the permittee shall prepare and submit a standby plan for reducing the emissions of air contaminants during periods of an Episode Alert, Warning, and Emergency. The standby plan is subject to approval by the Director.

I.E. Authority of Department

Nothing in the permit or conditions thereto shall negate any authority granted to the Division of Natural Resources or the Alabama Department of Environmental Management pursuant to the Alabama Environmental Management Act or regulations issued thereunder. [§ 22-28-23, Code of AL 1975, as amended]

II. NON-FEDERALLY ENFORCEABLE GENERAL (FACILITY-WIDE) PERMIT CONDITIONS

II.A. Objectionable Odors

This permit is issued with the condition that the operation of this facility by the owner or operator will not result in the emission of objectionable odors as defined in COHRAR Part 6.7.

III. FACILITY-SPECIFIC FEDERALLY ENFORCEABLE PERMIT CONDITIONS

III.A. Applicability

1. This source is subject to PSD-BACT emission limitations.
2. This source is subject to the New Source Performance Standards (NSPS) as defined in 40 CFR 60, Subpart MM and the General Provisions in Subpart A.
3. This unit is subject to the opacity emission rate limits.
4. This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Hazardous Air Pollutant (HAP) Emissions from Surface Coating of Automobiles and Light-Duty Trucks Operations (IIII) as a "New Source".
5. This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Hazardous Air Pollutant (HAP) Emissions from Surface Coating of Miscellaneous Metal Parts and Products (MMMM) as a "New Source".
6. This source is subject to 112g emission limitations.

III.B. Emission Standards

1. Emission of Volatile Organic Compounds (VOCs) from this Unit, Mazda Line (Unit 200-M1, Unit 200-M2, Unit 200-M3, Unit 200-M5, Unit 200-M6, Unit 200-M7, Unit 200-M8, and Unit 200-M12) shall not exceed 294.3 tons per year (TPY) in any consecutive rolling 12-month period.
2. Emission of Volatile Organic Compounds (VOCs) from the combined plantwide emissions from MTMUS (Permits Z001-Z007) shall not exceed 1,367 tons per year (TPY) in any consecutive rolling 12-month period.
3. Emission of Volatile Organic Compounds (VOCs) from this Unit, Mazda Line (Unit 200-M9) from all Miscellaneous Cleaning Materials shall not exceed 72.4 tons per year (TPY) in any consecutive rolling 12-month period.

4. Emission of Volatile Organic Compounds (VOCs) from this Unit, Mazda Line (Unit 200-M10) from all Purge Materials shall not exceed 169.6 tons per year (TPY) in any consecutive rolling 12-month period.
5. Emission of Volatile Organic Compounds (VOCs) from this Unit, Mazda Line (Unit 200-M11) from all Wiping Solvents shall not exceed 13.5 tons per year (TPY) in any consecutive rolling 12-month period.
6. Emission of Volatile Organic Compounds (VOCs) from this Unit, Mazda Line (Unit 300-M1) from all Wax Applications shall not exceed 30.7 tons per year (TPY) in any consecutive rolling 12-month period.
7. This source (Wax Application)(300-M1) is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Hazardous Air Pollutant (HAP) Emissions from Surface Coating of Miscellaneous Metal Parts and Products (MMMM) as defined in 40 CFR 63, Subpart MMMM §63.3880-3981 to include §63.3890 (a) on a calendar monthly average (1.9 pounds VHAP/gallon of coating solids/12-month compliance period).
8. This source is subject to the applicable emissions standards of New Source Performance Standards (NSPS) as defined in 40 CFR 60, Subpart MM §60.392 to include §60.392 (a), (b), and (c) on a calendar monthly average.

OPERATION	VOC EMISSION LIMIT lb./gal ACS
Primecoat: E-coat (Unit 200-M1)	1.34
Topcoat: Basecoat (Unit 200-M3) & Clearcoat (Unit 200-M3)	12.27

9. This source is subject to the BACT limits below:

OPERATION	MONTHLY VOC EMISSION LIMIT lb./gal ACS
Primecoat: E-coat (Unit 200-M1)	0.1
Guidecoat: Basecoat Booth (Unit 200-M3) & Clearcoat Booth and Oven (Unit 200-M3)	4.80
Blackout (Unit 200-M5)	1.00 lb./gal, as applied
Sealer/Deadener (Unit 200-M2)	0.30 lb./gal, as applied
Wax Application (Unit 300-M1) (monthly average)	4.0 lb./gal, as applied

10. This source is subject to the BACT limits below:

OPERATION	VOC BACT
Combined Ecoat Exhaust (Mazda and Toyota Lines) ECOAT-TO (Unit 1500-101)	95% Removal Efficiency

The Combined Ecoat Exhaust (Mazda and Toyota Lines) ECOAT-TO (Unit 1500-101) shall not emit greater than 0.52 pounds of CO/hour as measured in accordance with 40 CFR Part 60, Appendix A, Method 10, or equivalent method as approved by the Department, if required to test by the Department (3-hour arithmetic average).

The Combined Ecoat Exhaust (Mazda and Toyota Lines) ECOAT-TO (Unit 1500-101) shall not emit greater than 0.82 pounds of NO_x/hour as measured in accordance with 40 CFR Part 60, Appendix A, Method 7, 7E, or equivalent method as approved by the Department, if required to test by the Department (3-hour arithmetic average).

11. This source is subject to the BACT limits below:

OPERATION	VOC BACT
Combined Sealer Oven Exhaust (Mazda and Toyota Lines) SEALER-TO (Unit 1500-102)	95% Removal Efficiency

The Combined Sealer Oven Exhaust (Mazda and Toyota Lines) SEALER-TO (Unit 1500-102) shall not emit greater than 0.24 pounds of CO/hour as measured in accordance with 40 CFR Part 60, Appendix A, Method 10, or equivalent method as approved by the Department, if required to test by the Department (3-hour arithmetic average).

The Combined Sealer Oven Exhaust (Mazda and Toyota Lines) SEALER-TO (Unit 1500-102) shall not emit greater than 0.32 pounds of NO_x/hour as measured in accordance with 40 CFR Part 60, Appendix A, Method 7, 7E, or equivalent method as approved by the Department, if required to test by the Department (3-hour arithmetic average).

12. This source is subject to the BACT limits below:

OPERATION	VOC BACT
Combined Clearcoat Booth Exhaust (Mazda and Toyota Lines) CCBOOTH-TO (Unit 1500-103)	95% Removal Efficiency

Combined Topcoat Oven Exhaust (Mazda and Toyota Lines) TCOVEN-TO (Unit 1500-104)	95% Removal Efficiency
--	------------------------

The Combined Clearcoat Booth Exhaust (Mazda and Toyota Lines) CCBOOTH-TO (Unit

1500-103) and Combined Topcoat Oven Exhaust (Mazda and Toyota Lines) TCOVEN-TO (Unit 1500-104) shall not emit greater than 1.09 pounds of CO/hour as measured in accordance with 40 CFR Part 60, Appendix A, Method 10, or equivalent method as approved by the Department, if required to test by the Department (3-hour arithmetic average).

The Combined Clearcoat Booth Exhaust (Mazda and Toyota Lines) CCBOOTH-TO (Unit 1500-103) and Combined Topcoat Oven Exhaust (Mazda and Toyota Lines) TCOVEN-TO (Unit 1500-104) shall not emit greater than 1.73 pounds of NO_x/hour as measured in accordance with 40 CFR Part 60, Appendix A, Method 7, 7E, or equivalent method as approved by the Department, if required to test by the Department (3-hour arithmetic average).

13. This source is subject to the BACT limits below:

OPERATION	PARTICULATE BACT #/hour
Mazda Line Topcoat Booth (Unit 200- M3)	0.6
Mazda Line Blackout Booth (Unit 200-M5)	0.1
Mazda Line Cavity Wax Booth (Unit 200-M6)	0.02
Mazda Line Offline Repair Booth (Unit 200-M7)	0.02
Mazda Line Underbody Touch-Up Booth (Unit 200-M8)	0.003

14. Only natural gas may be used as fuel in the combustion equipment with the exception of the diesel fueled emergency generator(s), diesel fueled emergency fire pump(s), and gasoline engines.
15. This source (Phosphate/E-Coat)(200-M1), (Sealer/Misc. Body Coatings)(200-M2), (Topcoat System)(200-M3), (Miscellaneous Cleaning)(200-M9), (Purge Materials)(200-M10), (Wiping Solvents)(200-M11), (Assembly Final Repair Area)(300-M2), and (Windshield Installation)(300-M3) is/are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Hazardous Air Pollutant (HAP) Emissions from Surface Coating of Automobiles and Light Duty Trucks (III) as defined in 40 CFR 63, Subpart III §63.3080-3176 to include §63.3890 (a), (b), (c), (d), and (f) on a calendar monthly average.
16. The Combined Ecoat Exhaust (Mazda and Toyota Lines) ECOAT-TO (Unit 1500-101), Combined Sealer Oven Exhaust (Mazda and Toyota Lines) SEALER-TO (Unit 1500-102), Combined Clearcoat Booth Exhaust (Mazda and Toyota Lines) CCBOOTH-TO (Unit 1500-103), and Combined Topcoat Oven Exhaust (Mazda and Toyota Lines) TCOVEN-TO (Unit 1500-104) shall be operated at or above the temperature (3-run arithmetic average) at which compliance is demonstrated during the initial performance test, or subsequent tests which demonstrate compliance.
17. VOC BACT for Unit 300-M4: A Stage II vapor control system or On Board Vapor Recovery system shall be installed and used during filling of the gas tank for each vehicle.

18. The following units will be captured and directed to the Combined Ecoat Exhaust (Mazda and Toyota Lines) ECOAT-TO (Unit 1500-101):
E-Coat Tank (Unit 200-T1 and Unit 200-M1)
and Curing Oven (Unit 1500-8 and Unit 1500-21)
19. The following units will be captured and directed to the Combined Sealer Oven Exhaust (Mazda and Toyota Lines) SEALER-TO (Unit 1500-102):
Sealer Oven (Unit 1500-9 and Unit 1500-22)
20. The following units will be captured and directed to the Combined Clearcoat Booth Exhaust (Mazda and Toyota Lines) CCBOOTH-TO (Unit 1500-103):
Topcoat Booth Solventborne Clearcoat (Interior) (Unit 200-T4 and Unit 200-M3)
Topcoat Booth Solventborne Clearcoat (Exterior) (Unit 200-T4 and Unit 200-M3)

The following units will be captured and directed to the Combined Topcoat Oven Exhaust (Mazda and Toyota Lines) TCOVEN-TO (Unit 1500-104):
Topcoat Curing Oven (Unit 1500-15 and Unit 1500-28)

MTMUS may change the number of thermal oxidizers and specific zones of Unit 200-T4 and Unit 200-M3 exhausted to the thermal oxidizers; however, MUMUS must provide accurate descriptions of the zones going to the thermal oxidizers and must receive updated air permits prior to commencement of operation.

21. The following (112g) emission limits are applicable:

MTMUS shall implement a work practice plan to minimize organic HAP emissions from the storage, mixing, and conveying of coatings, thinners, and cleaning materials used in, and waste materials generated by, all coating operations for which emission limits are established.

22. The stack(s) associated with this (these) source(s) shall not exhibit greater than 10% opacity measured in accordance with 40 CFR Part 60, Appendix A, Method 9 per COHRAR § 6.1.2. If opacity of 5% or greater is observed from a stack, the operator shall investigate the cause and make any necessary corrective actions.
23. VOC BACT: MTMUS shall utilize good work practices that are practically and economically feasible that reasonably minimize coating materials and clean-up/purge/general solvent usage in all operations. Coatings, solvents, and other VOC containing material will be handled in such a way as to minimize VOC emissions from storage, handling, coating, and cleanup. Closed containers shall be used for the storage and disposal of cloth or other material used for VOC containing material cleanup or usage. Coatings and other fresh or spent VOC coating material will be stored in closed containers.

III.C. Compliance and Performance Test Methods and Procedures

1. The HAP content by weight of each HAP-containing material used shall be determined using vendor provided material safety data sheets or technical data sheets that contain a listing of individual regulated HAP ingredients expressed as a percent by weight. Should the Department request verification of formulation data, the HAP content of coatings shall be determined on a random basis using EPA Test Method 311, as defined in 40 CFR 63, Appendix A, or an alternative method approved in advance.
2. The VOC content by weight of each VOC containing material used shall be determined using EPA Test Method 24, as defined in 40 CFR 60, Appendix A, or an alternative method approved in advance. Equivalent vendor data based on this method is an appropriate substitute. The VOC content of coatings may be determined by test method on a random basis to verify formulation data and such other times as the Department may request.
3. EPA document *"Protocol for Determining Daily VOC Emission Rate of Automobile and Light Duty Truck Topcoat Operations"*, June 10, 1988, and revisions thereafter, shall be used to determine transfer efficiencies, booth/oven splits, and control efficiencies for compliance with the VOC BACT Determinations. The transfer efficiencies listed in 40 CFR 60, Subpart MM or approved by the Administrator, shall be used to determine compliance with the NSPS limits in Proviso Number III.B.7 of this permit.
4. Method 5 or 5a as defined in 40 CFR 60, Appendix A, or equivalent method as approved by the Department, shall be used in the determination of particulate emissions from the stack.
5. Method 7 or 7E as defined in 40 CFR 60, Appendix A, or equivalent method as approved by the Department, shall be used in the determination of Nitrogen oxides emissions from the stack.
6. Method 10 as defined in 40 CFR 60, Appendix A, or equivalent method as approved by the Department, shall be used in the determination of Carbon Monoxide emissions from the stack.
7. Method 9 as defined in 40 CFR 60, Appendix A, or equivalent method as approved by the Department, shall be used in the determination of the opacity of the stack emissions.
8. Method 18 or 25, as determined by the Department, as defined in 40 CFR 60, Appendix A, or equivalent method as approved by the Department, shall be used in the determination of Volatile Organic Compound emissions from the stack. The test method will be determined by the Department before testing.

III.D. Emission Monitoring

1. The monitoring requirements in this permit shall be as required in Section III.E--Recordkeeping and Reporting Requirements in addition to those listed below.

2. Emissions tests to demonstrate removal and destruction efficiency for the control devices are to be conducted for VOCs (for emission points: Combined Ecoat Exhaust (Mazda and Toyota Lines) ECOAT-TO (Unit 1500-101), Combined Sealer Oven Exhaust (Mazda and Toyota Lines) SEALER-TO (Unit 1500-102), Combined Clearcoat Booth Exhaust (Mazda and Toyota Lines) CCBOOTH-TO (Unit 1500-103), and Combined Topcoat Oven Exhaust (Mazda and Toyota Lines) TCOVEN-TO (Unit 1500-104) using the EPA Protocol specified in proviso number III.C.3), transfer efficiencies, booth splits, control efficiencies, for the coatings used in coating operations using Method 24 or 311, or equivalent methods as approved by the Department, as appropriate and other items as determined at intervals not to exceed 3 years or if a significant model change occurs (as determined by the Department) following the date of initial compliance testing. All test reports must be submitted to the Department within 30 days of completion of testing, unless an extension is granted by the Department. Emission tests are to be conducted by persons familiar with and using the EPA Sampling Train and Test Procedure as described in the Code of Federal Regulations, Title 40, Part 60, Method 18 or 25, 24 or 311 as appropriate as required by the Department.
3. A continuous recorder for the emission points: Combined Ecoat Exhaust (Mazda and Toyota Lines) ECOAT-TO (Unit 1500-101), Combined Sealer Oven Exhaust (Mazda and Toyota Lines) SEALER-TO (Unit 1500-102), Combined Clearcoat Booth Exhaust (Mazda and Toyota Lines) CCBOOTH-TO (Unit 1500-103), and Combined Topcoat Oven Exhaust (Mazda and Toyota Lines) TCOVEN-TO (Unit 1500-104) shall be installed, calibrated, and maintained to record the combustion temperature in a permanent form suitable for inspection upon request. The records shall be retained for at least five years following the date of such measurement.
4. The wet/dry filtration system(s) for this unit(s) shall be inspected for proper operation twice weekly. The manufacturer's suggested rates for the control equipment shall be used to determine proper control device operation.
5. Whenever maintenance checks required in proviso III.D.4 are out of normal operational range, corrective action to minimize emissions shall be taken within 48 hours, followed by an additional maintenance check(s) to confirm that emissions are reduced to normal.
6. This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Hazardous Air Pollutant (HAP) Emissions from Surface Coating of Miscellaneous Metal Parts and Products (MMMM) as defined in 40 CFR 63, Subpart MMMM §63.3880-3981.
7. This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Hazardous Air Pollutant (HAP) Emissions from Surface Coating of Automobiles and Light Duty Trucks (III) as defined in 40 CFR 63, Subpart III §63.3080-3176.

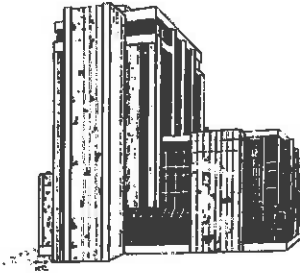
III.E. Recordkeeping and Reporting Requirements

1. Accurate and understandable records of consumption of VOCs, which record at least the last five years of data, will be maintained in a permanent form suitable for inspection and be available immediately upon request. This facility shall provide a copy of records and supporting background documents upon request that pertain to this permit. These records shall contain the following information:
 - (A) The type, quantity in gallons, and weight in pounds of each VOC or VHAP containing material used during each calendar month.
 - (B) The percent by weight of VOCs, water, solids, VHAPs, and exempt VOC compounds content of each VOC containing material used each calendar month.
 - (C) The percent by volume of VOCs, water, solids, VHAPs, and exempt VOC compounds content of each VOC containing material used each calendar month.
 - (D) Compliance with VOC and VHAP limits shall be based upon monthly material use inventories and demonstrated destruction efficiency of the RTOs . Emissions may be adjusted for VOC and VHAP content of material removed from the plant as waste or returns if the record keeping and details surrounding the materials are approved in advance.
 - (E) Complete inventories of the VOC and VHAP containing materials (their usage, VOC content and VHAP content) shall be made at the end of each calendar month.
 - (F) The amount of VOCs emitted per calendar month from the coating and cleaning operations in units of pounds and tons.
 - (G) The rolling 12-month total of VOCs emitted from the coating and cleaning operations in units of pounds and tons.
 - (H) A report summarizing the above information shall be submitted each calendar quarter by the 30th day of the month following the end of the quarter, in a format approved by the Department in advance.
 - (I) By the 30th day of the month following the end of each month, compliance with all provisos in this permit will be determined. These records will be maintained for 5 years. Should this facility, at any time, exceed the limits in this permit, the Department must be notified in writing within ten (10) days of the identification of the exceedance.
2. The minimum operational temperature of the combustion chamber of the thermal oxidizer(s) for the process equipment shall be determined by test. Following testing, the temperature corresponding to an acceptable VOC destruction efficiency shall be established as the minimum operation temperature of the combustion chamber. This minimum operation temperature will be calculated on a consecutive 3-hour averaging time period. A temperature reading must normally be taken at least every five minutes. The

temperature data must be instantaneously recorded on a chart or other permanent record form which shows continuous temperature readings of the combustion chamber temperature. The record must be maintained for at least five years following the data recording.

3. The thermal oxidizer(s) must have audible alarm or easily detectable signal which will provide a warning when the combustion chamber temperature decreases to less than the established minimum operational temperature. The origin and detectability of the audible or other signal shall be such that it can be readily heard or detected by the operator or another person who will immediately determine the cause and take appropriate action to correct any problem and/or record the malfunction/reason. The time, duration, cause(s), and the action(s) taken for any operating temperature less than the established minimum shall be recorded in a form suitable for inspection. These records shall be maintained for at least five years. If the 3 hour rolling average falls below the minimum operational temperature for more than 15 minutes, the facility will cease introducing bodies to each respective coating process, but may finish processing bodies already coated through each respective flash-off/oven area.
4. A recording-type temperature measuring device shall be used to measure and record the temperature in the combustion chamber of the thermal oxidizer(s). The recording instrument will be located for convenient reference and be of the type which provides direct reading and recording in degrees Fahrenheit. The combustion chamber temperature of the thermal oxidizer(s) will be recorded for all system operations and the recordings will be maintained in a form suitable for inspection for a period of five years.
5. When any bypassing of the thermal oxidizer(s) (TO) occurs, the time, date, or duration, estimated VOC emissions, and equipment process(es) bypassed will be recorded. Records will be maintained of any malfunction or non-operation of the TO, which results in an increase in the VOC emissions from any or all process equipment. These records will be maintained in a form suitable for inspection for a period of five years.
6. A log book or electronic records of the twice weekly maintenance checks required in proviso III.D.4 shall be retained for at least five years and available for inspection upon request. This log book or electronic records should also include the nature and date of any maintenance actions taken to correct maintenance episodes as required in III.D.5.
7. This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Hazardous Air Pollutant (HAP) Emissions from Surface Coating of Miscellaneous Metal Parts and Products (MMMM) as defined in 40 CFR 63, Subpart MMMM §63.3880-3981.
8. This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Hazardous Air Pollutant (HAP) Emissions from Surface Coating of Automobiles and Light Duty Trucks (III) as defined in 40 CFR 63, Subpart IIII §63.3080-3176.

9. A report summarizing the following information shall be submitted each calendar quarter by the 30th day of the month following the end of the quarter, in a format approved by the Department in advance. The report shall provide the following information for the thermal oxidizer(s), as applicable.
- (A) The quantity of the solvents of VOCs in the coatings applied.
 - (B) The VOCs not released or exhausted into the atmosphere by the thermal oxidizer(s).
 - (C) The VOCs vented to the thermal oxidizer(s) by the process operation.
 - (D) The estimated averaged destruction efficiency of the thermal oxidizer(s).
 - (E) The VOCs released or exhausted into the atmosphere by the thermal oxidizer(s).
 - (F) The time and date of any and all periods of coating operations where the temperature of the thermal oxidizer(s) is below the three hour average temperature recorded during the most recent performance test which complied with the required overall VOC emission reduction.
 - (G) The cumulative or total quantity of VOCs released or exhausted into the atmosphere by the machines and thermal oxidizer control units during the applicable month and previous eleven months.



CITY OF HUNTSVILLE
NATURAL RESOURCES AND ENVIRONMENTAL
MANAGEMENT DIVISION

PSD AIR PERMIT

Issued to: Mazda Toyota Manufacturing U.S.A., Inc. (MTMUS)

Location: 9000 Greenbrier Parkway NW

Huntsville, Alabama 35756

Permit Number(s) Description of Source(s)

7-08-P391-Z005

Manufacturing of Automobiles, Toyota Line and Mazda Line

Miscellaneous Natural Gas-Fired Combustion Sources
(Unit 1500)

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, Code of Alabama 1975, 22-28-1 to 22-28-23 (the "AAPCA") and the Alabama Environmental Management Act, as amended, Code of Alabama 1975, 22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and the City of Huntsville Air Pollution Control Rules and Regulations, Ordinance 72-156, as amended ("COHRAR") and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to operate the equipment, device(s) or other article(s) described above.

Pursuant to the Clean Air Act of 1990, all conditions of this permit are federally enforceable by EPA, the Alabama Department of Environmental Management ("ADEM"), the City of Huntsville Division of Natural Resources and Environmental Management ("the Department"), and citizens in general. Those provisions which are not required under the Clean Air Act of 1990 are considered to be local permit provisions and are not federally enforceable by EPA and citizens in general. Those provisions are contained in separate sections of this permit.

Page 1 of 10 pages

Date of Issuance: DRAFT

DIRECTOR

NATURAL RESOURCES AND ENVIRONMENTAL
MANAGEMENT DIVISION
CITY OF HUNTSVILLE, ALABAMA

PSD AIR PERMIT
TABLE OF CONTENTS

I. GENERAL (FACILITY-WIDE) PERMIT CONDITIONS

GENERAL AIR POLLUTION CONTROL REQUIREMENTS 1

II. FACILITY SPECIFIC PERMIT CONDITIONS

..... 5

DRAFT

Mazda Toyota Manufacturing U.S.A., Inc. (MTMUS)
9000 Greenbrier Parkway NW
Huntsville, Alabama 35756

I. FEDERALLY ENFORCEABLE GENERAL (FACILITY-WIDE) PERMIT CONDITIONS

I.A. General Air Pollution Control Requirements

1. Duty to Comply

The permittee shall comply with all conditions of the City of Huntsville Rules and Regulations (COHRAR). Noncompliance with this permit will constitute a violation of the Clean Air Act of 1990 and COHRAR, and may result in an enforcement action; including but not limited to, permit termination, revocation and reissuance or modification; or denial of a permit renewal application by the permittee.

2. Operation of Capture and Control Devices

All air pollution control devices and capture systems for which this Permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emissions of air contaminants shall be established.

3. Circumvention

The permittee shall not cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes any emission of air contaminant which would otherwise violate this Permit or COHRAR.

I.B. General Monitoring, Inspection, Record-Keeping and Reporting Requirements

1. Monitoring, Records and Reporting

- (A) The Director may require the permittee to establish and maintain records; make reports; install, use and maintain monitoring equipment or methods; sample emissions in accordance with such methods, at such locations and intervals, and using such procedures and provide such emissions reports as are prescribed by the Director to demonstrate compliance with the terms of this Permit and with COHRAR.
- (B) Records and Reports as the Director shall prescribe on air contaminants or fuel shall be recorded, compiled, and submitted on forms provided by the Director or in formats approved by the Director.
- (C) All required sampling and testing shall be made and the results calculated in accordance with sampling and testing procedures and methods approved by the Director. All required

samples and tests shall be made under the direction of persons qualified by training and/or experience in the field of air pollution control. To the extent practicable, test methods and procedures established by Part 60, Part 61, and Part 63 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised, shall be employed.

- (D) Sampling and testing facilities adequate to facilitate sampling and testing as required under section I.B.1(C) above will be provided and maintained by the permittee.

2. Inspection and Entry

- (A) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of the City of Huntsville Division of Natural Resources & Environmental Management ("the Department") to enter upon the permittee's premises on or at which an air contaminant source is located or is being constructed, installed, or established at any reasonable time to ascertain the state of compliance with this Permit and the COHRAR.
- (B) No person shall obstruct, hamper, or interfere with any such inspection initiated under I.B.2(A) above.
- (C) If requested, the owner or operator shall receive a report from the Director which sets forth the findings of the inspection initiated under I.B.2(A) above with respect to compliance status.

3. Display of Permit

The permittee shall keep this Permit under file or on display at all times at the permitted facility and shall make this Permit available for inspection by any and all persons who may request to see it.

4. Equipment Maintenance or Breakdown

- (A) In case of shutdown of air pollution control equipment for scheduled maintenance for a period greater than one (1) hour, the intent to shut down shall be reported to the Department at least twenty-four (24) hours prior to the planned shut-down. The Department shall be notified when maintenance on the air pollution control equipment is complete and the equipment is operating.
- (B) In the event there is a breakdown of equipment in such a manner as to cause increased emission of air contaminants for a period greater than one (1) hour, the person responsible for such equipment shall notify the Department within an additional twenty-four (24) hours and provide a statement giving all pertinent facts, including the duration of the breakdown. The Department shall be notified when the breakdown has been corrected.

I.C. Permit Modification, Renewal, and Termination

1. Transfer

This permit is not transferable, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another, or from one person to another.

2. New Air Pollution Sources

- (A) A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.
- (B) Every application for a permit shall be filed in the manner and form prescribed by the Director and shall give all the information necessary to enable the Director to make the determination required by COHRAR Part 3.3.

3. Revocation for Cause

This Permit may be revoked for any of the following causes:

- (A) Failure to comply with any condition of this Permit or COHRAR.
- (B) Failure to notify the Director prior to operation of any article, machine, equipment, or other contrivance subject to the requirements of COHRAR § 3.1.2(a).
- (C) Failure to establish and maintain such records, make such reports, or install, use, or maintain such monitoring equipment or methods; and sample such emissions in accordance with such methods at such locations, intervals and procedures as the Director may prescribe in accordance with COHRAR § 1.9.2.
- (D) Failure to allow the Director or his authorized representative upon proper identification to:
 - (1) enter any premises, at reasonable times, where any article, machine, equipment, or other contrivance described in COHRAR § 3.1.2 is located or in which any records required to be kept by this Permit or by COHRAR are located;
 - (2) have access to and copy any records required to be kept by this Permit or by COHRAR;
 - (3) inspect any monitoring equipment or practices being maintained pursuant to this Permit or COHRAR; OR

- (4) have access to and sample any discharge of air contaminants resulting directly or indirectly from the operation of any article, machine, equipment or other contrivance described in COHRAR § 3.1.2.
- (E) Failure to comply with the provisions of an administrative order issued by the Director concerning the permitted facility.
- (F) For any other cause, after a hearing which establishes, in the judgment of the Director, that continuance of this Permit is not consistent with the purpose of the Act or regulations under it, or is not consistent with the purposes of the Federal Clean Air Act or regulations under it.

4. Major Source Operating Permit Application

As the facility subject to this Permit is also subject to the requirements of 40 CFR Part 70, application for issuance of the facility's initial Major Source Operating Permit (MSOP) must be made within twelve (12) months of startup of the process equipment identified in this Permit.

I.D. Emergency Provisions

1. Emergency Procedure

The permittee shall comply with the provisions of an emergency order to immediately reduce or discontinue the emission of air contaminants, if the Director finds that such action is necessary to protect human health or safety, in accordance with COHRAR § 2.9.

2. Emission Reduction Standby Plan

Within thirty (30) days of receipt of a written request from the Director, the permittee shall prepare and submit a standby plan for reducing the emissions of air contaminants during periods of an Episode Alert, Warning, and Emergency. The standby plan is subject to approval by the Director.

I.E. Authority of Department

Nothing in the permit or conditions thereto shall negate any authority granted to the Division of Natural Resources or the Alabama Department of Environmental Management pursuant to the Alabama Environmental Management Act or regulations issued thereunder. [§ 22-28-23, Code of AL 1975, as amended]

II. NON-FEDERALLY ENFORCEABLE GENERAL (FACILITY-WIDE) PERMIT CONDITIONS

II.A. Objectionable Odors

This permit is issued with the condition that the operation of this facility by the owner or operator will not result in the emission of objectionable odors as defined in COHRAR Part 6.7.

III. FACILITY-SPECIFIC FEDERALLY ENFORCEABLE PERMIT CONDITIONS

III.A. Applicability

1. This source is subject to PSD-BACT emission limitations.
2. This unit is subject to the opacity emission rate limits.
3. This source is currently subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Hazardous Air Pollutant (HAP) Emissions from Industrial, Commercial, and Institutional Boilers and Process Heaters (DDDDD) as a "New Source". MTMUS and the Department will review and determine applicability of this subpart based on final engineering equipment designs.
4. This unit is subject to the particulate emission rate limits for Process Industries - General sources.

III.B. Emission Standards

1. Emission of Volatile Organic Compounds (VOCs) from the combined plantwide emissions from MTMUS (Permits Z004-Z007) shall not exceed 1,367 tons per year (TPY) in any consecutive rolling 12-month period.
2. This source is subject to the BACT limits below:

OPERATION	PARTICULATE BACT (PM/PM10/PM2.5) Lb./MMBtu of heat input
Natural Gas Fired Units (Unit 1500)	0.0005

3. This source is subject to the BACT limits below:

OPERATION

**NO_x BACT
Lb./MMBtu of heat input**

Process Ovens	0.072
Spare Parts Oven	0.10
Thermal Oxidizers	0.06
Jig Cleaning/Miscellaneous Devices	0.10
All Other Process Devices	0.06
Natural Gas Fired Units w/ Low NO _x burners (Unit 1500 HVAC)	0.06

4. Only natural gas may be used as fuel in the combustion equipment with the exception of the diesel fueled emergency generator(s), diesel fueled emergency fire pump(s), and gasoline engines.
5. The stack(s) associated with this (these) source(s) shall not exhibit greater than 10% opacity measured in accordance with 40 CFR Part 60, Appendix A, Method 9 per COHRAR § 6.1.2. If opacity of 5% or greater is observed from a stack, the operator shall investigate the cause and make any necessary corrective actions.
6. MTMUS shall utilize good work practices that are practically and economically feasible that reasonably minimize emissions of NO_x and other pollutants in all operations. Periodic maintenance of each listed burner in the section: Natural Gas Fired Units (Unit 1500) will occur at a minimum as suggested by the manufacturer of the unit.
7. This unit shall not discharge into the atmosphere particulate matter in excess of: $E = 1.38H^{-0.44}$ where H is the heat input in millions of BTU/hr.

III.C. Compliance and Performance Test Methods and Procedures

1. Method 5 or 5a as defined in 40 CFR 60, Appendix A, or equivalent method as approved by the Department, shall be used in the determination of particulate emissions from the stack.
2. Method 201a and 202 as defined in 40 CFR 60, Appendix A, or equivalent method as approved by the Department, shall be used in the determination of particulate emissions less than 10 microns from the stack.
3. Method 201a and 202 as defined in 40 CFR 60, Appendix A, or equivalent method as approved by the Department, shall be used in the determination of particulate emissions less than 2.5 microns from the stack.
4. Method 7 or 7E as defined in 40 CFR 60, Appendix A, or equivalent method as approved by the Department, shall be used in the determination of Nitrogen oxides emissions from the stack.

5. Method 10 as defined in 40 CFR 60, Appendix A, or equivalent method as approved by the Department, shall be used in the determination of Carbon Monoxide emissions from the stack.
6. Method 9 as defined in 40 CFR 60, Appendix A, or equivalent method as approved by the Department, shall be used in the determination of the opacity of the stack emissions.
7. Method 18 or 25, as determined by the Department, as defined in 40 CFR 60, Appendix A, or equivalent method as approved by the Department, shall be used in the determination of Volatile Organic Compound emissions from the stack. The test method will be determined by the Department before testing.

III.D. Emission Monitoring

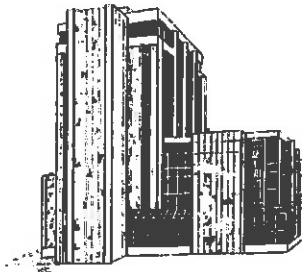
1. The monitoring requirements in this permit shall be as required in Section III.E.-- Recordkeeping and Reporting Requirements in addition to those listed below.
2. When operating, each listed burner in the section: Natural Gas Fired Units (Unit 1500) shall be visually observed a minimum of once monthly for greater than normal visible emissions as determined by previous observations.
3. Whenever observed visible emissions are greater than normal, corrective action to minimize emissions shall be taken within 24 hours, followed by an additional observation to confirm that emissions are reduced to normal. Records shall be recorded in a permanent form suitable for inspection upon request and retained for at least five years following the date of such measurement.

III.E. Recordkeeping and Reporting Requirements

1. Accurate and understandable records of consumption of natural gas, which record at least the last five years of data, will be maintained in a permanent form suitable for inspection and be available immediately upon request. This facility shall provide a copy of records and supporting background documents upon request that pertain to this permit. These records shall contain the following information:
 - (A) Usage of natural gas by MTMUS in the previous month.
 - (B) Calculations of criteria pollutants based on natural gas used in the previous month using established emission factors.
 - (C) The amount of VOCs and other criteria pollutants emitted per calendar month in units of tons.
 - (D) The rolling 12-month total of VOCs and other criteria pollutants in units of tons.
 - (E) A report summarizing the above information shall be submitted each calendar quarter by

the 30th day of the month following the end of the quarter, in a format approved by the Department in advance.

- (F) By the 30th day of the month following the end of each month, compliance with all provisos in this permit will be determined. These records will be maintained for 5 years. Should this facility, at any time, exceed the limits in this permit, the Department must be notified in writing within ten (10) days of the identification of the exceedance.
- 2. A log book of the monthly visible observations required in proviso III.D.2 shall be retained for at least five years and available for inspection upon request. This log book should also include the nature and date of any maintenance actions taken to correct excess opacity episodes.



CITY OF HUNTSVILLE
NATURAL RESOURCES AND ENVIRONMENTAL
MANAGEMENT DIVISION

PSD AIR PERMIT

Issued to: Mazda Toyota Manufacturing U.S.A., Inc. (MTMUS)

Location: 9000 Greenbrier Parkway NW

Huntsville, Alabama 35756

Permit Number(s) Description of Source(s)

7-08-P391-Z007

Manufacturing of Automobiles: Toyota and Mazda (MTMUS) Lines

Three (3) Diesel-Fired Emergency Generators, Two (2)
Natural Gas-Fired Emergency Generators & Two (2)
Emergency Fire Pump Engines (Unit 1700)

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, Code of Alabama 1975, 22-28-1 to 22-28-23 (the "AAPCA") and the Alabama Environmental Management Act, as amended, Code of Alabama 1975, 22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and the City of Huntsville Air Pollution Control Rules and Regulations, Ordinance 72-156, as amended ("COHRAR") and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to operate the equipment, device(s) or other article(s) described above.

Pursuant to the Clean Air Act of 1990, all conditions of this permit are federally enforceable by EPA, the Alabama Department of Environmental Management ("ADEM"), the City of Huntsville Division of Natural Resources and Environmental Management ("the Department"), and citizens in general. Those provisions which are not required under the Clean Air Act of 1990 are considered to be local permit provisions and are not federally enforceable by EPA and citizens in general. Those provisions are contained in separate sections of this permit.

Page 1 of 10 pages

Date of Issuance: DRAFT

DIRECTOR

NATURAL RESOURCES AND ENVIRONMENTAL
MANAGEMENT DIVISION
CITY OF HUNTSVILLE, ALABAMA

PSD AIR PERMIT
TABLE OF CONTENTS

I. GENERAL (FACILITY-WIDE) PERMIT CONDITIONS

GENERAL AIR POLLUTION CONTROL REQUIREMENTS 1

II. FACILITY SPECIFIC PERMIT CONDITIONS

..... 5

DRAFT

Mazda Toyota Manufacturing U.S.A., Inc. (MTMUS)
9000 Greenbrier Parkway NW
Huntsville, Alabama 35756

I. FEDERALLY ENFORCEABLE GENERAL (FACILITY-WIDE) PERMIT CONDITIONS

I.A. General Air Pollution Control Requirements

1. Duty to Comply

The permittee shall comply with all conditions of the City of Huntsville Rules and Regulations (COHRAR). Noncompliance with this permit will constitute a violation of the Clean Air Act of 1990 and COHRAR, and may result in an enforcement action; including but not limited to, permit termination, revocation and reissuance or modification; or denial of a permit renewal application by the permittee.

2. Operation of Capture and Control Devices

All air pollution control devices and capture systems for which this Permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emissions of air contaminants shall be established.

3. Circumvention

The permittee shall not cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes any emission of air contaminant which would otherwise violate this Permit or COHRAR.

I.B. General Monitoring, Inspection, Record-Keeping and Reporting Requirements

1. Monitoring, Records and Reporting

- (A) The Director may require the permittee to establish and maintain records; make reports; install, use and maintain monitoring equipment or methods; sample emissions in accordance with such methods, at such locations and intervals, and using such procedures and provide such emissions reports as are prescribed by the Director to demonstrate compliance with the terms of this Permit and with COHRAR.
- (B) Records and Reports as the Director shall prescribe on air contaminants or fuel shall be recorded, compiled, and submitted on forms provided by the Director or in formats approved by the Director.
- (C) All required sampling and testing shall be made and the results calculated in accordance with sampling and testing procedures and methods approved by the Director. All required

samples and tests shall be made under the direction of persons qualified by training and/or experience in the field of air pollution control. To the extent practicable, test methods and procedures established by Part 60, Part 61, and Part 63 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised, shall be employed.

- (D) Sampling and testing facilities adequate to facilitate sampling and testing as required under section I.B.1(C) above will be provided and maintained by the permittee.

2. Inspection and Entry

- (A) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of the City of Huntsville Division of Natural Resources & Environmental Management ("the Department") to enter upon the permittee's premises on or at which an air contaminant source is located or is being constructed, installed, or established at any reasonable time to ascertain the state of compliance with this Permit and the COHRAR.
- (B) No person shall obstruct, hamper, or interfere with any such inspection initiated under I.B.2(A) above.
- (C) If requested, the owner or operator shall receive a report from the Director which sets forth the findings of the inspection initiated under I.B.2(A) above with respect to compliance status.

3. Display of Permit

The permittee shall keep this Permit under file or on display at all times at the permitted facility and shall make this Permit available for inspection by any and all persons who may request to see it.

4. Equipment Maintenance or Breakdown

- (A) In case of shutdown of air pollution control equipment for scheduled maintenance for a period greater than one (1) hour, the intent to shut down shall be reported to the Department at least twenty-four (24) hours prior to the planned shut-down. The Department shall be notified when maintenance on the air pollution control equipment is complete and the equipment is operating.
- (B) In the event there is a breakdown of equipment in such a manner as to cause increased emission of air contaminants for a period greater than one (1) hour, the person responsible for such equipment shall notify the Department within an additional twenty-four (24) hours and provide a statement giving all pertinent facts, including the duration of the breakdown. The Department shall be notified when the breakdown has been corrected.

I.C. Permit Modification, Renewal, and Termination

1. Transfer

This permit is not transferable, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another, or from one person to another.

2. New Air Pollution Sources

- (A) A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.
- (B) Every application for a permit shall be filed in the manner and form prescribed by the Director and shall give all the information necessary to enable the Director to make the determination required by COHRAR Part 3.3.

3. Revocation for Cause

This Permit may be revoked for any of the following causes:

- (A) Failure to comply with any condition of this Permit or COHRAR.
- (B) Failure to notify the Director prior to operation of any article, machine, equipment, or other contrivance subject to the requirements of COHRAR § 3.1.2(a).
- (C) Failure to establish and maintain such records, make such reports, or install, use, or maintain such monitoring equipment or methods; and sample such emissions in accordance with such methods at such locations, intervals and procedures as the Director may prescribe in accordance with COHRAR § 1.9.2.
- (D) Failure to allow the Director or his authorized representative upon proper identification to:
 - (1) enter any premises, at reasonable times, where any article, machine, equipment, or other contrivance described in COHRAR § 3.1.2 is located or in which any records required to be kept by this Permit or by COHRAR are located;
 - (2) have access to and copy any records required to be kept by this Permit or by COHRAR;
 - (3) inspect any monitoring equipment or practices being maintained pursuant to this Permit or COHRAR; OR

- (4) have access to and sample any discharge of air contaminants resulting directly or indirectly from the operation of any article, machine, equipment or other contrivance described in COHRAR § 3.1.2.
- (E) Failure to comply with the provisions of an administrative order issued by the Director concerning the permitted facility.
- (F) For any other cause, after a hearing which establishes, in the judgment of the Director, that continuance of this Permit is not consistent with the purpose of the Act or regulations under it, or is not consistent with the purposes of the Federal Clean Air Act or regulations under it.

4. Major Source Operating Permit Application

As the facility subject to this Permit is also subject to the requirements of 40 CFR Part 70, application for issuance of the facility's initial Major Source Operating Permit (MSOP) must be made within twelve (12) months of startup of the process equipment identified in this Permit.

I.D. Emergency Provisions

1. Emergency Procedure

The permittee shall comply with the provisions of an emergency order to immediately reduce or discontinue the emission of air contaminants, if the Director finds that such action is necessary to protect human health or safety, in accordance with COHRAR § 2.9.

2. Emission Reduction Standby Plan

Within thirty (30) days of receipt of a written request from the Director, the permittee shall prepare and submit a standby plan for reducing the emissions of air contaminants during periods of an Episode Alert, Warning, and Emergency. The standby plan is subject to approval by the Director.

I.E. Authority of Department

Nothing in the permit or conditions thereto shall negate any authority granted to the Division of Natural Resources or the Alabama Department of Environmental Management pursuant to the Alabama Environmental Management Act or regulations issued thereunder. [§ 22-28-23, Code of AL 1975, as amended]

II. NON-FEDERALLY ENFORCEABLE GENERAL (FACILITY-WIDE) PERMIT CONDITIONS

II.A. Objectionable Odors

This permit is issued with the condition that the operation of this facility by the owner or operator will not result in the emission of objectionable odors as defined in COHRAR Part 6.7.

III. FACILITY-SPECIFIC FEDERALLY ENFORCEABLE PERMIT CONDITIONS

III.A. Applicability

1. This source is subject to PSD-BACT emission limitations.
2. This unit is subject to the opacity emission rate limits.
3. These units are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Hazardous Air Pollutant (HAP) Emissions from Stationary Reciprocating Internal Combustion Engines (ZZZZ) as a "New Source".
4. The diesel-fueled units shall comply with the applicable requirements of the New Source Performance Standards (NSPS), Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (IIII) as defined in 40 CFR Part 60, Subpart (IIII) §60.4200-4219.
5. The natural gas-fueled units shall comply with the applicable requirements of the New Source Performance Standards (NSPS), Standards of Performance for Stationary Spark Ignition (SI) Internal Combustion Engines (JJJJ) as defined in 40 CFR Part 60, Subpart (JJJJ) §60.4230-4248.

III.B. Emission Standards

1. Emission of Volatile Organic Compounds (VOCs) from the combined plantwide emissions from MTMUS (Permits Z001-Z007) shall not exceed 1,367 tons per year (TPY) in any consecutive rolling 12-month period.
2. These units shall be operated and maintained in accordance with the manufacturers' written instructions.
3. The Emergency stationary CI RICE unit(s) shall:
 - a. Change oil and filter every 500 hours of operation or annually, whichever comes first;
 - b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;
 - c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

- d. Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
4. Only Low Sulfur Diesel Fuel (15 ppm) with a sulfur content of 15 ppm or less may be used as fuel in the diesel-fueled emergency generator(s) and/or the diesel fueled emergency fire pumps.
 5. Only natural gas may be used as fuel in the natural gas-fueled emergency generators with the exception that propane may be used for a maximum of 100 hours per year as an alternative fuel only during emergency operations.
 6. Each emergency generator and fire pump engines must be equipped with a non-resettable hour meter.
 7. Only one single emergency generator or emergency fire pumps may be operated on any calendar day for maintenance or testing purposes. This proviso does not apply to emergency use purposes.
 8. The stack(s) associated with this (these) source(s) shall not exhibit greater than 10% opacity measured in accordance with 40 CFR Part 60, Appendix A, Method 9 per COHRAR § 6.1.2. If opacity of 5% or greater is observed from a stack, the operator shall investigate the cause and make any necessary corrective actions.
 9. MTMUS shall utilize good work practices that are practically and economically feasible that reasonably minimize diesel usage in all operations. Diesel fuel will be handled in such a way as to minimize VOC emissions from storage, handling, and cleanup. Fresh or spent diesel fuel will be stored in closed containers.
 10. These units shall comply with the applicable requirements of the New Source Performance Standards (NSPS)- Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (IIII) as defined in 40 CFR Part 60, Subpart (IIII) §60.4200-4219 or Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (JJJJ) as defined in 40 CFR Part 60, Subpart (JJJJ) §60.4230-4248 as applicable.

III.C. Compliance and Performance Test Methods and Procedures

1. Method 9 as defined in 40 CFR 60, Appendix A, or equivalent method as approved by the Department, shall be used in the determination of the opacity of the stack emissions.

III.D. Emission Monitoring

1. The monitoring requirements in this permit shall be as required in Section III.E--Recordkeeping and Reporting Requirements.

III.E. Recordkeeping and Reporting Requirements

1. Records of engine usage must be kept in a permanent form suitable for inspection. These records should record if the usage was for emergency, maintenance checks, readiness checks, or other usage. The records shall be retained for at least five years from the date of generation and available upon request.
2. These units shall comply with the applicable requirements of the New Source Performance Standards (NSPS), Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (IIII) as defined in 40 CFR Part 60, Subpart (IIII) §60.4200-4219 or Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (JJJJ) as defined in 40 CFR Part 60, Subpart (JJJJ) §60.4230-4248 as applicable.
3. Billing statements from supplier(s) may be used to record the sulfur content of diesel fuel supplied. Such records shall be maintained and prepared in a form suitable for inspection within thirty (30) days of the end of the calendar month during which the fuel was received.
4. The following federal requirements apply to these unit(s):
 - (A) *Requirements for emergency stationary ICE.* If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (2)(i) through (iii) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (2)(i) through (iii) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (2)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
 - (1) There is no time limit on the use of emergency stationary ICE in emergency situations.
 - (2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (2).
 - (i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (2)(ii) of this section. Except as provided in paragraph (3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.